

# Municipal Journal

## And Engineer

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### CROWDING SHADE TREES

Four Rows of Elms in Commonwealth Avenue, Boston,  
Considered Inadvisable by Experts—Problem  
of Thinning Out Discussed

THE plan of the Park Commission of Boston which provides four rows of shade trees along Commonwealth Avenue has been quite strongly opposed by landscape gardeners, because there results too great a crowding of the trees to permit of proper growth and development. Recently Prof. Charles Sprague Sargent has called attention to the fact that in 1880 both he and the distinguished landscape gardener, F. L. Olmsted, proposed the removal of the four rows of trees which had already been planted on that avenue between Arlington and Dartmouth streets, and the planting in their place of two rows of trees from one end of the avenue to the other. The city government, however, refused to act upon this suggestion. In 1880 and 1881, by order of the Common Council, the planting of four rows of trees was continued in this avenue up to Massachusetts Avenue, the trees in the four rows standing opposite each other so that the transverse distance between the trees of the inner rows was only about 40 feet. Elms were used in all cases, both American and a large variety of European elms, and thus within twenty years of the planting of these trees it became evident that they could not be kept much longer in good condition, and it is now desirable to replace a large number of them. Not only were the trees too close together, but they had been badly selected and planted in insufficient soil. There seemed to be

only two alternatives to the Park Commissioners: to allow all the trees to gradually die and then replace them with properly selected and well-spaced trees, or to gradually remove enough old trees to make room for such new trees properly selected and planted. The first plan would have resulted in a most unsatisfactory appearance for several years, during the death of the old trees and the growth of the young ones. The second plan was accordingly recommended, it being possible to preserve for several years enough of the old trees to give the appearance of a planted avenue until the younger trees had obtained sufficient size. The high class of residences along this street and its prominence made such a decision almost compulsory.

Professor Sargent admits that four rows of trees unquestionably produce a better effect than two rows, and by the four-row plan the central walk and the two roadways would be more quickly shaded. It might be said, however, that eight rows of trees would produce a better effect than four rows. But the planting space in Commonwealth Avenue is only 100 feet wide, and the experience in the vicinity of Boston is that if more than two rows be planted within such a space it is not possible to keep the English field elms in good condition when they reach a height and size commensurate with the width and dignity of the avenue; in fact, even with two rows only the trees would cramp and injure each other before attaining their full size.

Considering the life which an elm tree can, and should be expected to, attain, and the time involved in this, it would seem to be the part of wisdom to look more to the future appearance of a shade tree plantation, rather than merely to the first ten or fifteen years after the planting of the trees.



PARKWAY IN COMMONWEALTH AVENUE, BOSTON, MASS.

## OSAKA WATER WORKS EXTENSION

Rapid Growth of City—Direct Pumping System—Twenty Acres of Sand Filters—Sedimentation Basins—Construction Details

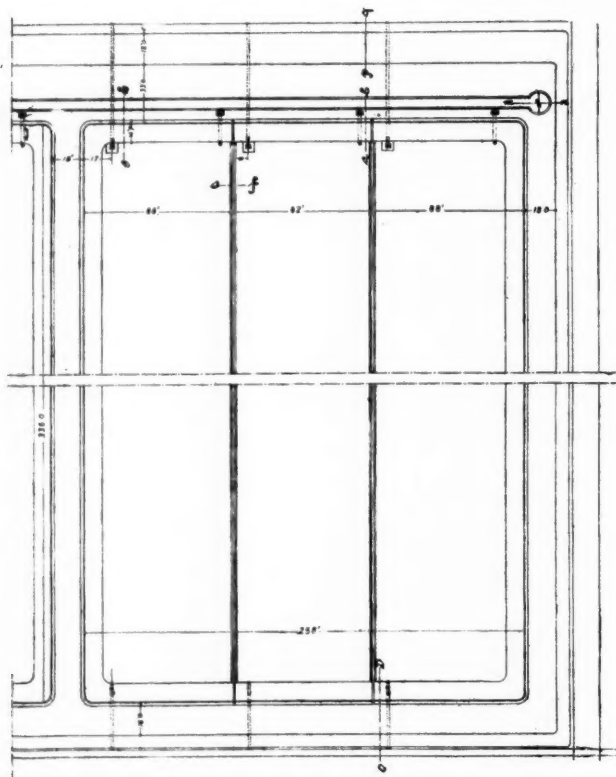
By YOSHIO KATAGIRI

THE municipal water works of Osaka, Japan, were designed in 1891 to supply a population of 610,000, with provision for meeting a future increase in population up to 800,000; the population at that time being 483,179. The works were completed in 1893, but it soon became evident that sufficient provision had not been made for the rapid increase in population which has taken place, and inside of five years the demand had already surpassed the supply, even after the plant had been extended to provide for 800,000 inhabitants. The rapid growth of the city is shown in the following table:

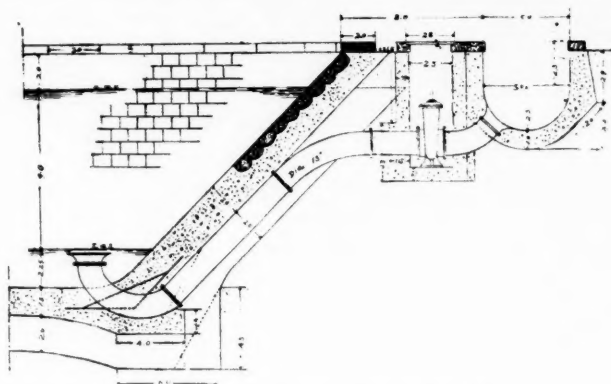
Year.	Population.	Year.	Population.
1891	483,179	1900	881,344
1892	479,895	1901	921,617
1893	484,130	1902	951,496
1894	482,308	1903	988,728
1895	488,666	1904	1,026,767
1896	504,226	1905	1,069,458
1897	758,285*	1906	1,117,151
1898	811,855	1907	1,172,138
1899	849,171	1908	1,217,765

\*This sudden increase was due to the extension of the city limit, which took place in this year.

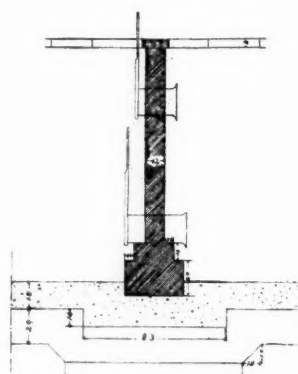
The original plant was a combined pumping and gravity system, using a distributing reservoir on a hill near the city. Some years ago several designs were prepared for meeting the urgent demand for increased supply, but serious difficulty was encountered in finding a proper elevation within practicable distance for the location of another distributing reservoir. The original distributing reservoir is situated in Osaka Castle, at an elevation of 114 feet above the sea level, but occupies practically the entire available space, so that a new reservoir could not be located at that point. Excepting the Castle, there was no other elevation sufficiently high nearer than six or seven miles distant from the center of the city. As to the source of supply, there was little discussion or doubt, there being practically no alternative to the use of the New Yodo river.



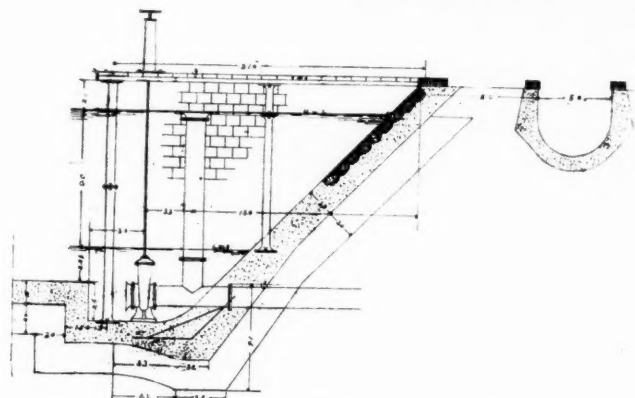
PLAN OF SEDIMENTATION BASIN



SEDIMENTATION BASIN, SECTION ON ab



SEDIMENTATION BASIN  
SECTION ON ef



SEDIMENTATION BASIN, SECTION ON gh

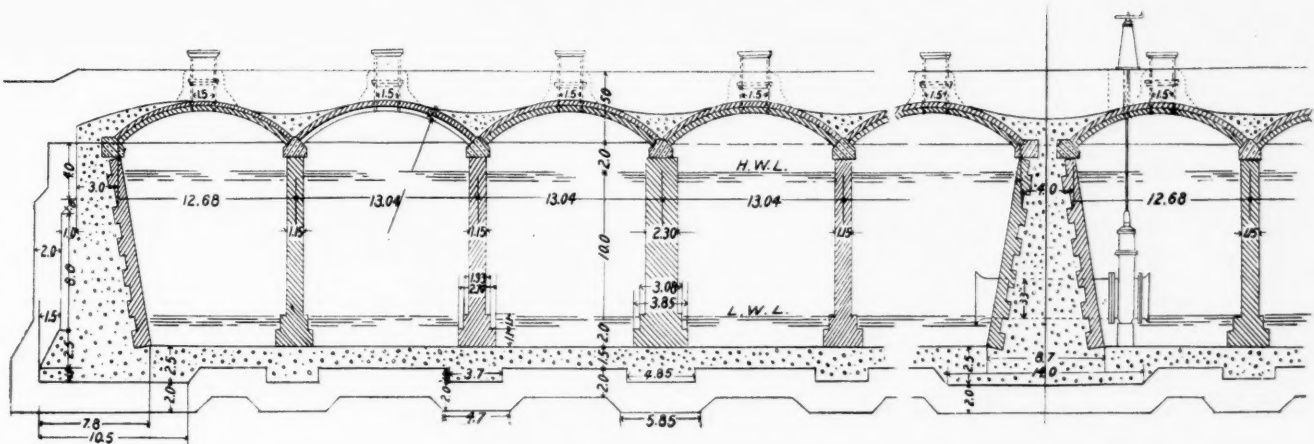
Finally, in July, 1906, the City Council determined upon an extension of the works to a capacity capable of supplying a population of 1,500,000, with provision for extending them for a population of 2,000,000. A hill near Suita was selected as a site for a new reservoir. In August, 1907, however, the Council decided to change the plan and adopt a direct-pressure system instead of the gravity (as a matter of fact, since the original distributing reservoir is connected to the upper end of the system, this would be called in this country a direct-

indirect system). The engineers believe that the direct-pressure system in this case will be free from danger, inasmuch as the new system is connected with the present reservoir, which may prove a most valuable auxiliary in time of emergency.

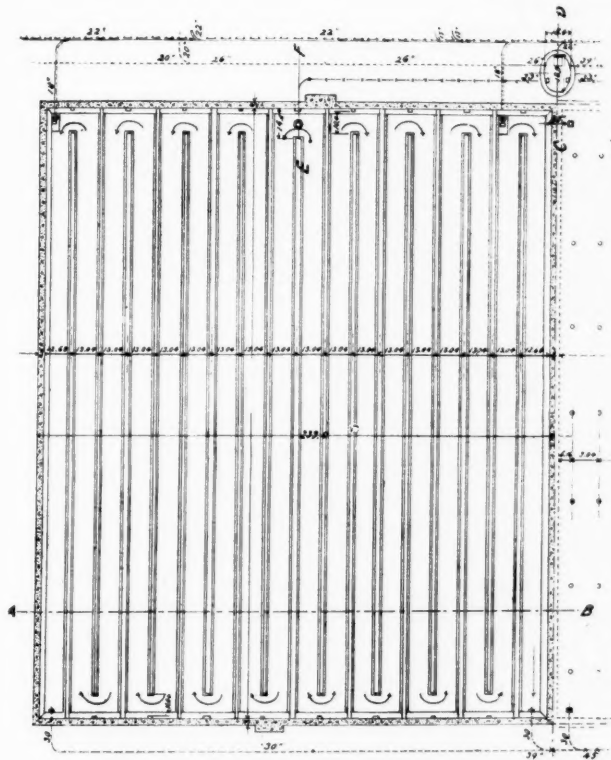
The new intake and filtration plant are to be located about three miles above the city, at a village called Kunishima, on the north bank of the New Yodo river. There are two inlet towers constructed of brick and stone, each having the shape of an ellipse  $22\frac{1}{2}$  by 15 feet. These inlet towers are connected by four 36-inch pipe lines to four receiving basins each 120 by 24 feet and 10 feet deep; from these receiving basins 36-inch suction pipes extend to the pump pits of the low lift pumps. These low lift pumps have a maximum capacity of 7,000 cubic feet per minute against a  $25\frac{1}{2}$ -foot head. They force the water through 45 and 48-inch pipes to the sedimentation basins.

There are seven sedimentation basins, each 336 by 258 feet and 11 feet deep. Six of these only are to be in continuous use, one being reserved for emergencies. These basins are built with masonry sides and partition walls and are lined with concrete on a layer of puddle.

From the sedimentation basins the water goes to fourteen filter basins, each 240 feet square and  $9\frac{1}{2}$  feet deep. These are to be filled to a depth of 4 ft. above the sand and the



CLEAR WATER RESERVOIR, CROSS SECTION ab



PLAN OF CLEAR WATER RESERVOIR

water is intended to pass through them at a vertical rate of 8 feet in 24 hours (about 2,600,000 gallons per acre per day). The side walls are lined with reinforced concrete on puddle, the surface being covered with paving brick. The bottom is constructed in a similar fashion, but without the brick. From the filters the purified water goes to four clear water reservoirs, each 276 by 234 feet long and 12 feet deep. The reservoirs are covered by roofs of brick arches. Over the roofs is spread a thick layer of soil for additional protection in cold weather.

From the filters the water passes through 42-inch pipes to

the main pumping station, which contains nine Worthington high-duty, triple-expansion engines, each with a capacity of 1,000 cubic feet per minute against a 160-foot head. The boiler-room is designed for sixteen 240-hp. boilers. From the pumping station the water is carried to the city by two distributing mains, one 42 inches in diameter and the other 39 inches, passing in their course underneath the bed of the New Yodo river.

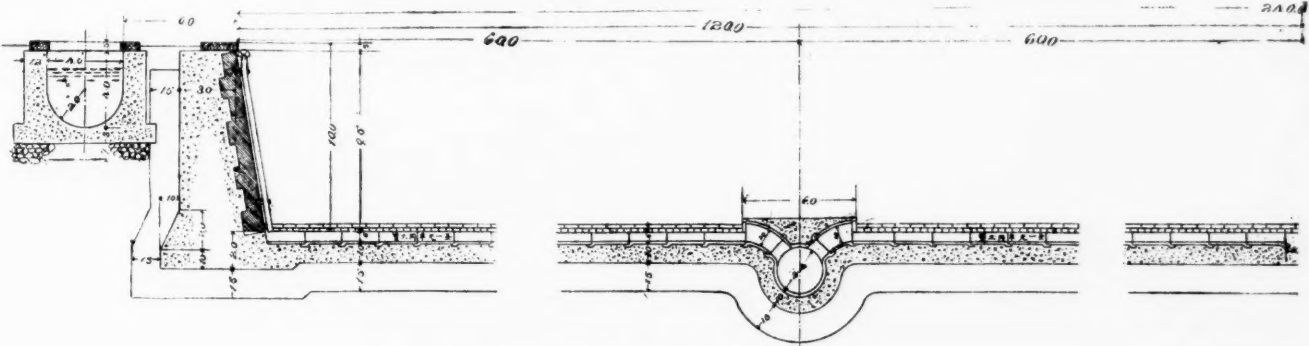
Work on the extension was begun in October, 1907, and it is expected to have it completed by March, 1912. The estimated cost of the whole is \$5,490,000. At the same time that these provisions are being made for extending the supply, an effort is also being made to reduce the consumption by installing meters, and it is expected that all services will be metered by the end of March, 1910.

In connection with deciding upon the supply and the amount of purification necessary, analyses were made of the water of the New Yodo river, the results of which are shown in the following table. Each of the figures shown in this table is the result of ten analyses:

		Hirakata (14 Miles Above the City)	Eguchi (4 Miles Above the City)	Kunishima (3 Miles Above the City)	Nakano (1 Mile Above the City)
Turbidity.....	max.	40.	40.0	30.0	60.0
	min.	3.0	2.0	2.0	4.0
	aver.	18.9	15.3	13.0	19.3
Odor.....		None	None	None	None
	max.	4.363	5.091	4.545	4.724
	min.	2.546	3.192	2.727	2.000
Chlorine.....	aver.	3.395	3.889	3.729	3.758
		Trace*	Trace*	Trace*	Trace*
		Trace*	Trace*	Trace*	Trace*
Sulphates.....		None	None	None	None
		None	None	None	None
		None	None	None	None
Alkalinity.....	max.	3.908	3.950	3.337	6.280
	min.	2.075	2.528	2.307	2.844
	aver.	3.089	3.052	2.983	3.758
Residue on evapora- tion.....	max.	76.600	97.000	80.800	88.800
	min.	52.000	48.800	58.400	45.600
	aver.	59.780	69.200	67.380	65.360
Bacteria, per cubic centimeter.....	max.	4.535	1.715	2.980	2.720
	min.	.154	.228	.215	.117
	aver.	1.049	.739	.816	.790

\* Less than .001.

Examination of the plans, several of which are reproduced in connection with this article, indicates that in a number of ways the Japanese practice differs somewhat from that of this



CROSS SECTION, HALF OF ONE FILTER BASIN



## STREAM POLLUTION IN AMERICA

What the Several States Are Doing to Abate It—State Boards of Health Requiring Treatment of Sewage—Several States Inactive

At a Conference of State and Provincial Boards of Health of North America, held in Washington last June, the Committee on the Pollution of Streams appointed last year presented a report in which it gave some data concerning the extent to which the pollution of streams was being regulated by the various States. Ohio, New Jersey and Kansas have, according to this report, passed laws during the last few years which "are especially worthy of note as indicating advancement and the confidence which the Legislatures of these States must feel in these State Boards of Health." From the reports of the secretaries of the Boards of Health of the several States they abstract a number of statements showing what is being accomplished by them.

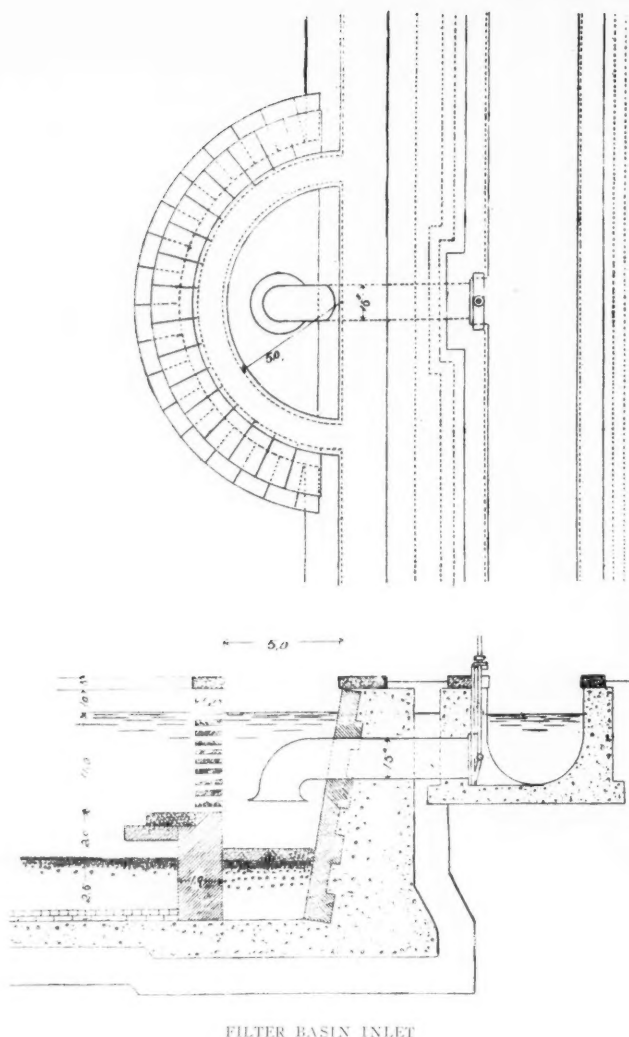
In Massachusetts the use of the larger rivers as direct sources of public water supplies without purification has practically ceased; but polluted river waters are still used in many factories and mills for purposes other than drinking. Of the 92 cities and towns in that State having systems of sewerage, four cities and 19 towns employ some form of treatment for the removal of organic matter from the sewage. This is exactly one-fourth of the total number.

In New Jersey there are 54 sewage purification plants in operation or ready for operation by municipalities and large public institutions. The policy of that State is to allow no untreated sewage to be discharged from new systems into waters of the State. The Board of Health is also compelling municipalities to install purification plants on existing sewerage systems, and 22 are now under orders to cease pollution of the streams, these including all municipalities on the Delaware River.

The Ohio State Board of Health has been asked to investigate 18 complaints under the act prohibiting stream pollution, and has ordered sewage disposal works to be installed in four of the cities before Jan. 1, 1910. The constitutionality of the law under which they act has been questioned, but if decided in their favor they hope to prevent the pollution of all the streams in the State.

In Michigan there are several cities and villages using septic tanks, and the Legislature is being urged to pass laws for the control of water supplies and treatment of sewage. In California the size of the streams affords such dilution as to prevent serious trouble, but the State Board of Health is endeavoring to cultivate a sentiment against allowing sewage to enter them. In Florida the reverse is the case, most of the streams being small or sluggish and many of the towns and cities, particularly in the interior, use filtration plants. In Maryland many of the larger towns maintain sewage disposal plants, but about 120 restraining orders have been issued against municipalities and corporations during the past year on account of stream pollution. It is reported that the large rivers of the western shore are polluted, some badly.

In New Hampshire there is not a single sewage disposal plant in operation, but the State Board of Health has prohibited the pollution of several of the lakes and streams from which public water supplies are taken and reports that none of these, except the Merrimac and Connecticut rivers, can be said to be badly polluted. Indiana's new anti-pollution law, passed this year, forbids the pollution of streams, its enforcement being in the hands of the State Board of Health. The condition there is said to be a serious one, as the ground water supply is giving out, except in the northern part of the State, and all water supplies must be obtained from the streams. In Texas the question of stream pollution is assuming prominence. Houston treats its sewage on 15 acres of sand filters; but, in general, the question is just beginning to assume importance, the centers of population being quite widely scattered. Wisconsin aims to for-



FILTER BASIN INLET

country. One of the most noticeable is in connection with the clear water reservoir. In this country what has become practically a standard form of construction for covered reservoirs is the groined arch roof supported by square columns. In the clear water reservoir for Osaka we find the roof composed of a series of parallel arches supported on walls rather than columns. Instead of piercing the walls to allow the water to flow more or less directly across the basin, these are so designed as to compel the water to take a winding course, very similar to that employed in a number of cases in this country for sedimentation basins. Our correspondent does not inform us of the reason for this feature of the design, nor can we conjecture it. He states that a considerable cover of earth is given to the roof of the reservoir as protection against frost; yet we find open channels used for distributing the water to the filter beds. We believe also that the use of puddle and concrete combined for securing water-tight embankments is very seldom practiced in this country at the present time; concrete alone, water-proofed if necessary by a coating or by the use of a mixture for this purpose, being relied upon in most cases where it is used.

## SEWERAGE OF RIO JANEIRO

NEARLY all of the city of Rio Janeiro, Brazil, is now sewered, except the suburbs or outlying districts, and many of these are to receive extensions of the system in a short time. The city has adopted modern regulations for plumbing, and this and the house connections to both sewers and water mains are given unusually thorough inspection. The water pressure there is lower than in most cities in this country, and for this reason it has been considered practicable to use much lighter piping in the houses as well as in the streets.



bid absolutely the discharge of crude sewage into any of its waterways. Septic tanks and filter beds are used quite extensively.

In Vermont the State Board of Health five years ago ordered that no sewage should be discharged into any stream or body of water without its permission. Five cities and villages of the State, which were taking their supply from polluted sources, were directed to secure their new supply from sources approved by the Board. (This seems to be the reverse of the action elsewhere, where the main efforts have been to prevent the pollution of the water rather than the use of polluted water. We believe it is the unquestionable duty of Boards of Health both to restrict pollution and also to prevent the use of unsafe water.)

Colorado reports inability to obtain legislation necessary for preventing pollution. The same condition exists in Minnesota likewise, and two marked typhoid epidemics have resulted in that State from stream pollution. Kansas reports 15 disposal plants in operation, or about to be installed, all of the septic-tank and filter-bed type. The State Board there is upheld by a very strong and workable law. In New York many of the streams are very badly polluted and the condition is very serious. There are about 50 sewage disposal plants in operation, and the State Health Department requires cities extending their systems or building new ones to make provisions for sewage purification plants to be in operation at the end of a specified time.

## MUNICIPAL BOND SALES

Data Concerning Sales of Municipal Bonds During June by Cities of Less than 100,000 Population—  
Financial Statistics of Cities Listed

NAME OF CITY	Estimated Population	ACTUAL VALUE OF ASSESSABLE PROPERTY (estimated)		Ratio of Ass'd to Act'l Value	Bonded Debt	Sinking Fund	NET BONDED DEBT		Tax Rate Per \$1,000 Ass'd Value	BOND SALES, JUNE, 1909				Basis
		Total	Per Capita				Total	Per Capita		Term of Years	Amount	Interest	Price	
Phoenix, Ariz.										14-25 op. av.	\$155,000 5% s.a.		\$108.695 4.186	
Pomona, Cal.	12,500	\$20,000,000	\$1,600	25%	\$168,000				\$20.00	1-40 ser.	53,000 4% s.a.		105.492 4.101	
Ross, Cal.											62,000		103.741	
San Luis Obispo, Cal.	5,000	9,000,000	1,800	61%	276,600		\$276,600	\$55.00	\$8.00	20 av.	180,000 5% s.a.		110.355 4.227	
So. Norwalk, Conn.	7,500	12,000,000	1,600	50%	614,000		614,000	82.00	8.00	35	161,000 4% s.a.		101.003 3.947	
Stafford, Conn.										9-28 ser.	40,000 4% s.a.		98.389 4.125	
Hawkinsville, Ga.	4,000	2,000,000	500	63%	76,000	\$5,000	71,000	18.00	12.00	5-29 op.	15,000 5% s.a.		101.006 4.769	
Marietta, Ga.										30	11,000 5% s.a.		108.33 4.492	
Parma, Ida.	300	590,000	1,966	30%	12,000		12,000	40.00	1.50	10-20 op.	12,000 6% s.a.		Par	
Newton, Ill.										2-11 ser.	10,000 5% s.a.		103.027 4.45	
Columbus, Ind.											26,000 3% s.a.		100.119	
Paoli, Ind.	1,200	850,000	708	50%	325				7.00	1-9 ser.	4,500 4% s.a.		Par	
Des Moines, Ia.										20	350,000 4% s.a.		Par	
Kansas City, Kan.										1-10 ser.	500,000 5% s.a.		101.125 4.765	
Salina, Kan.										30	1,097,850 4% s.a.		103.409 4.296	
Belfast, Me.										5 1/2 av.	38,120 5% s.a.		101.534 4.68	
Braintree, Mass.										20	113,000 4% s.a.		103.89 3.722	
Dudley, Mass.										5 av.	25,000 3% s.a.		100.07 3.484	
Everett, Mass.	31,944	24,950,350	781	100%	840,000	310,832	529,168	16.00	18.50	5-29 ser.	100,000 3% s.a.		100.26 3.479	
Haverhill, Mass.	40,818	26,964,866	661	100%	1,757,000	535,644	1,221,356	29.93	15.64	1-20 ser.	20,000 4% s.a.		104.893 3.44	
Lowell, Mass.	96,000	77,858,891	811	100%	3,596,638	895,529	2,701,109	28.00	20.40	10	72,000 3% s.a.		100.44 3.447	
New Bedford, Mass.	90,000	70,719,086	785	100%	5,564,000	1,574,871	4,016,129	44.62	17.60	1-10 ser.	120,000 3% s.a.		100.276 3.441	
No. Andover, Mass.										1-10 ser.	260,000 3% s.a.		Par	
Palmer, Mass.										1-20 ser.	100,000 3% s.a.		Par	
Quincy, Mass.	30,000	26,920,046	897	100%	1,816,440		1,816,440	60.55	19.70	9 1/2 av.	35,000 4% s.a.		104.02 3.483	
Somerville, Mass.	75,500	65,088,700	836	100%	1,466,500		1,466,500	19.00	18.40	1-18 ser.	18,000 4% s.a.		103.666 3.54	
Battle Creek, Mich.	30,000	19,243,000	641	100%	34,300		34,300	1.14	10.00	13 av.	40,000 3% s.a.		100.65 3.472	
Holland, Mich.										20	120,000 3% s.a.		100.469 3.472	
Traverse City, Mich.										40	40,000 3% s.a.		100.066 3.994	
Albert Lea, Minn.										17 1/6 av.	15,000 4% s.a.		100.422 4.206	
Fertile, Minn.										12 1/2 av.	50,000 4% s.a.		103.546 4.235	
Mahnomen, Minn.										20	50,000 4% s.a.		101.00 4.177	
Montgomery, Minn.										20	26,000 4% s.a.		Par	
Clarksdale, Miss.										15 av.	6,000 6% s.a.		103.166 5.686	
Coffeeville, Miss.										4 1/2 av.	8,500 5% s.a.		100.517 4.871	
Duck Hill, Miss.										5 1/2 av.	19,000 4% s.a.		100.642 3.869	
Grenada, Miss.										1-20 ser.	8,000 5% s.a.		100.325 4.96	
Sikeston, Mo.	3,500	3,500,000	1,000	25%	57,000	5,000	52,000	15.00	10.00	7 1/2 av.	8,000 6% s.a.		101.262 5.791	
Berlin, N. H.										20	27,500 5% s.a.		101.181 4.907	
Glen Ridge, N. J.	3,000	4,550,936	1,516	100%	235,000		235,000	78.00	1.71	5-20 op.	30,000 5% s.a.		101.083 4.754	
Hackensack, N. J.	15,000	10,000,000	667	80%	337,000		337,000	22.40	18.20	20	90,000 3% s.a.		97.09 3.707	
Kearny, N. J.										15-24 ser.	5,000 4% s.a.		Par	
Millville, N. J.										5-16 ser.	60,000 4% s.a.		101.05 4.374	
Portales, N. M.											112,000 4% s.a.		102.77 4.318	
Cortland, N. Y.	12,500	7,000,000	560	85%	240,000		240,000	19.20	15.60	29 1/2 av.	46,000 4% s.a.		104.634 4.223	
Hoosick Falls, N. Y.										24 1/2 av.	24,000 4% s.a.		101.76 4.382	
Hornell, N. Y.	16,000	7,500,000	469	65%	405,000		405,000	25.00	13.00	30	75,000 6% s.a.		101.333 5.904	
Kingston, N. Y.	25,556	11,220,266	439	83%	932,000		932,000	37.00	27.51	10 av.	30,636 4% s.a.		Par	
Lockport, N. Y.	18,000	8,586,895	477	100%	730,208		730,208	40.56	23.28	19 1/2 av.	13,951 4% s.a.		104.66 4.327	
Mechanicsville, N. Y.										1-10 ser.	23,408 4% s.a.		Par	
Mt. Pleasant, N. Y.										1-9 ser.	16,151 4% s.a.		100.085 4.968	
New Rochelle, N. Y.	27,000	24,000,000	889		1,772,017		1,772,017	65.63	24.62	4-23 ser.	3,305 4% s.a.		100.133 4.476	
North Hempstead, N. Y.										1-5 ser.	50,000 4.15% s.a.		106.16 4.094	
Pelham, N. Y.										1-12 ser.	12,000 4% s.a.		104.38 4.102	
Phelps, N. Y.										9 1/2 ser.	25,000 6% s.a.		106.69 4.061	
Rome, N. Y.										13 1/2 ser.	10,000 4% s.a.		Par	
Solvay, N. Y.										5 1/2 av.	61,000 5% s.a.		101.125 4.521	
Troy, N. Y.	76,000	54,250,172	714	100%	3,541,679	85,779	3,455,900	45.39	17.66	8 1/2 av.	25,000 5% s.a.		102.153 3.844	
W. Carthage, N. Y.										7-26 ser.	20,000 4% s.a.		100.518 4.456	
Hamlet, N. C.	3,000	800,000	266	75%	15,000		15,000	5.00	10.00	7-16 ser.	10,000 4% s.a.		100.37	
										7-18 ser.	12,000 4% s.a.		100.23	
										16-25 ser.	10,000 4% s.a.		100.20 3.982	
										16-24 ser.	9,000 4% s.a.		100.61 4.96	
										16 1/2 av.	60,000 4% s.a.			
										2 1/2 av.	4,000 5% s.a.			
										20	155,000 4% s.a.			
										5-29 ser.	150,000 4% s.a.			
										5 mos.	100,000 4% s.a.			
										4 mos.	100,000 4% s.a.			
										1-30 ser.	30,000 4% s.a.			
										30	10,000 5% s.a.			

## MUNICIPAL BOND SALES—Continued

NAME OF CITY	Estimated Population	ACTUAL VALUE OF ASSESSABLE PROPERTY (estimated)		Ratio of Ass'd to Act'l Value	Bonded Debt	Sinking Fund	NET BONDED DEBT		Tax Rate Per \$1,000 Ass'd Value	BOND SALES, JUNP, 1909				Basis
		Total	Per Capita				Total	Per Capita		Term of Years	Amount	Interest	Price	
Morven, N. C.										20	\$8,000 5% s.a.		\$106.30	4.61
Mt. Holly, N. C.										20	7,000 6% s.a.		106.05	5.497
Dickey, N. D.										20	1,700 4% Par			
Ashland, O.	6,800	\$7,000,000	\$1,029	40%	\$340,960	\$34,212	\$306,748	\$45.00	\$4.00	5½ av.	25,000 5% s.a.		105.264	3.926
Barberton, O.	10,000	5,600,000	560	50%	158,544	422	158,122	15.81	3.14	5½ av.	6,400 5% s.a.		105.40	3.90
Bowling Green, O.	5,000	6,000,000	1,200	40%	56,800	32,766	56,472	11.29	39.80	3 av.	30,320 5% s.a.		103.91	4.475
Canton, O.	45,000	60,000,000	1,333	25%	306,000		306,000	68.00	32.00	1-10 ser.	1,130 5% s.a.		103.91	4.475
Defiance O.										20	3,000 4% s.a.		Par	
Elmwood Place, O.										20	26,000 4% s.a.		102.078	3.85
Hamilton, O.	30,000	22,000,000	733	50%	1,064,505	54,684	1,009,821	33.66		6 av.	34,000 5% s.a.		104.52	4.14
Hamler, O.	750	120,000	160	33½%	2,000	800	1,200	1.60	52.00	6 av.	19,000 5% s.a.		104.43	4.157
Jackson, O.										6½ av.	13,000 5% s.a.		104.80	4.089
Lakewood, O.	10,000	12,000,000	1,200	37%	1,073,044	100,504	972,900	97.29	35.95	20	10,000 5% s.a.		111.293	4.162
Madisonville, O.	5,200	1,291,940	247		157,964		157,964	30.37	16.60	25	90,000 1% s.a.		101.79	3.887
Malta, O.										15	35,000 4% s.a.		101.471	3.87
Marble Cliff, O.										5½ av.	2,076 6% s.a.		103.009	5.36
Massillon, O.										10-20 op.	10,000 4% s.a.		100.61	3.925
Mt. Healthy, O.										5½ av.	77,537 5% s.a.		103.939	4.219
Napoleon, O.	5,000	3,000,000	600	33½%	186,890		186,890	37.38	47.20	20	10,000 4% s.a.		102.09	3.849
Norwood, O.	15,000	8,515,270	567	60%	880,672	65,819,790	81,485	54.00	13.84	25½ av.	2,000 4% s.a.		101.00	3.937
Oakley, O.										19½ av.	2,000 4% s.a.		113.512	3.08
Piqua, O.										25	30,000 4% s.a.		100.185	3.988
Rocky River, O.										2-14 ser.	13,000 4½% s.a.		103.015	4.054
Tiffin, O.	12,000	10,500,000	875	40%	504,700	12,500	492,200	41.02	24.00	25	30,000 4% s.a.		111.633	3.312
Urbana, O.	8,000	3,529,874	441	50%	107,250	2,000	105,250	13.00	30.00	5½ av.	20,000 4½% s.a.		102.01	4.103
Wooster, O.										25	6,000 4% s.a.		103.273	3.796
Youngstown, O.	60,483	56,882,000	940	50%	1,269,112	209,167	1,059,945	17.52	29.42	1-10 ser.	2,100 5% s.a.		101.142	4.762
Alva, Okla.										2-11 ser.	30,000 4½% s.a.		102.75	4.015
El Reno, Okla.										5-5-5 av.	3,000 4½% s.a.		102.066	4.145
Hydro, Okla.	1,000	500,000	500	50%					5.00	2½ av.	1,600 4% s.a.		100.277	3.913
Joseph, Ore.										3½ av.	10,000 4% s.a.		100.70	3.885
Altoona, Pa.	65,000	47,000,000	738	50%	1,421,000	191,079	1,229,921	19.00		4 av.	5,000 4% s.a.		101.75	4.14
College Hill, Pa.										1-10 ser.	9,000 4½% s.a.		101.40	3.898
Denver, Pa.	1,000	650,000	650	50%	22,500		22,500	22.50	4.00	20	10,000 4% s.a.		102.57	4.141
Jersey Shore, Pa.										3½ av.	26,000 5% s.a.		102.32	4.258
Ridgway, Pa.	6,000	1,800,000	300	33%	109,500	5,000	104,500	17.00	40.00	3½ av.	7,000 5% s.a.		102.53	4.258
St. Clair, Pa.										3½ av.	14,285 5% s.a.		100.10	4.966
Shamokin, Pa.	23,000	11,000,000	478	50%	141,100		141,100	6.00	7.50	3½ av.	600 5% s.a.		102.30	4.229
Trafford, Pa.										3½ av.	4,620 5% s.a.		101.60	4.462
Westerly, R. I.										3½ av.	3,195 5% s.a.		101.50	4.895
Chester, S. C.										25	35,000 5% s.a.		101.507	4.887
Eastley, S. C.	3,000	1,500,000	500	41%	15,000	2,500	12,500	4.00	4.50	25	50,000 5% s.a.		101.507	4.887
Clark, S. D.										25	20,000 5% s.a.		Par	
Etowah, Tenn.										20-40 op.	25,000 5% s.a.		101.137	5.851
Jackson, Tenn.										10-20 op.	20,000 6% s.a.		102.182	3.807
Clarendon, Tex.										15-29½ op.	300,000 4% s.a.		103.60	4.701
Dallas, Tex.	77,678	100,000,000	1,287	50%	2,928,750	268,000	2,660,750	34.00	19.00	18½ av.	15,000 5% s.a.		101.101	3.866
Hamlin, Tex.										10-30 op.	3,500 4% s.a.		Par	
Hillsboro, Tex.										10-30 op.	14,000 4% s.a.		102.021	4.544
Paris, Tex.	18,000	12,000,000	666	65%	423,000	105,975	318,025	16.00	9.50	5-30 op.	12,000 5% s.a.		104.243	4.207
San Angelo, Tex.										21½ av.	90,000 4½% s.a.		100.07	3.991
Richfield, Vt.										10-30 op.	24,000 4% s.a.		100.373	4.474
Davenport, Wash.										16-30 ser.	15,000 4½% s.a.		102.31	3.869
Parkersburg, W. Va.										30	100,000 4% s.a.		101.25	3.929
Beloit, Wis.										20	26,000 4½% s.a.		101.50	4.882
										5-20 op.	10,000 5% s.a.		Par	
										20	15,000 5% s.a.		102.10	4.835
										20	45,000 5% s.a.		100.25	
										20-40 op.	25,000 5% s.a.		101.60	4.86
										1-40 ser.	25,000 4% s.a.		Par	
										1-40 ser.	475,000 4% s.a.		84.34	
										1-40 ser.	200,000 4% s.a.		96.57	4.252
										5-40 op.	25,000 5% s.a.		102.10	4.522
										1-40 ser.	36,000 4½% s.a.		Par	
										20-40 op.	65,000 4½% s.a.		104.272	
										13	32,000 5% s.a.		110.656	4.266
										1-20 op.	8,000 4% s.a.		Par	
										20	21,066 5% s.a.		Par	
										1-9 ser.	270,000 4% s.a.		Par	
											9,000 5% a.		103.95	4.11

## COMMISSION GOVERNMENT FOR KANSAS CITY

On July 14 Kansas City, Kan., voted in favor of the commission form of government by a majority of 1,489 out of a total vote of 7,211, or with just about 70 per cent of the voters in favor of it. One somewhat unusual feature was that a considerable number of the votes were cast by women, these casting altogether 1,625 votes and giving a majority of 175 in favor of the commission form of government. Kansas City now has a population of more than 100,000 people, and is said to be the largest city in the United States which has voted to abolish the ward system. This is the second time that this matter has been voted upon in this city, the previous election having been held in June of last year, when commission government was defeated by a majority of 882. This was attributed to defects in the Kansas law, but this was afterward amended by the Legislature, with the result above stated. Petitions were presented last May asking Mayor Guyer to call a special election, the petition having the signatures of 3,488 voters. There are now six cities in Kansas which have adopted commission government—Leavenworth, Wichita, Hutchinson, Independence, Anthony and Kansas City.

The new plan calls for a government of the city by a Mayor and four Commissioners, who will succeed the present Mayor and City Council next April. The Commissioners will be elected for a term of two years and will receive a salary of \$3,000 a year. The Mayor will receive \$4,000 per annum. At present the Council is composed of 12 Aldermen.

## MUNICIPAL ASPHALT PLANTS

The city of Montreal, on account of difficulty experienced in connection with asphalt paving and patching by contract, decided early this spring to obtain a municipal plant of their own, and placed a rush order for a plant of 2,000 square yards capacity with the Warren Asphalt Paving Company. This was to have been completed by the first of August, but the contractors were able to do a little better than this and have already turned over the plant to the city. The Board of Public Works of Kansas City, Mo., also has decided to purchase a municipal asphalt plant, and has, within a few days, awarded a contract for a plant to the builders of the Montreal plant. This will be a small plant, but very complete, with provisions for handling cars of sand and stone, and large steel storage bins.

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## CHANGE OF ADDRESS

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It is further requested that our Subscription Department be notified if copies are not received promptly.

Readers are invited to contribute to the MUNICIPAL JOURNAL AND ENGINEER, either in the form of special articles or of letters discussing matters of current interest.

It is also desired that the facilities furnished by the reference library in this office should be widely known and freely used by those interested in municipal affairs. Visitors will be welcomed and provided with conveniences for search, and inquiries by mail will be promptly dealt with.

JULY 28, 1909.

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## Unprofitable Franchises

A STATEMENT made by Justice Houghton, in connection with a recent decision of the Appellate Division of the Supreme Court of New York concerning the approval by the Public Service Commission of a traction franchise granted by New York City, is worthy of more than passing notice. He stated:

The ability to serve the public by furnishing proper transportation is an element which the Commission is required to take into consideration, as well as the necessity for the construction.

A transportation corporation which faces certain bankruptcy the moment it starts cannot properly serve the public. Reasonable prosperity is necessary to reasonable service. Such a corporation only cumbers the ground and prevents another corporation from occupying the same field and giving proper service.

In its earnestness to build, a transportation corporation might agree to pay such a high price for the franchise and stipulate to carry passengers at such a low fare that it would be perfectly manifest that it could not operate at a profit.

It is generally considered that the municipal authorities are doing their fullest duty when they obtain the greatest concession possible from a company to which they grant a franchise. Ordinarily this is the case, since it may be assumed that those obtaining the franchise are perfectly competent to look out for themselves and not venture on a project in which there is no profit. Justice Houghton, however, directs attention to a danger which it is quite possible may exist. The proof of this is the considerable number of public service corporations, and especially trolley companies, which have become bankrupt within a few years after their organization. As he states, such a company, which is either bankrupt or in such financial straits that it is impossible for it to keep its plant at maximum efficiency, occupies the streets with its rails or pipes, or in other ways interferes with the immediate substitution of the same service by another company better able to serve the public. Moreover, such a condition is apt to lead to expensive and time-consuming litigation at the community's expense. The refusal of public officials to obtain the best terms which can be extorted from a public service corporation should not, however, be undertaken except where they are absolutely certain of their ground, and are confirmed in their opinion by the decision of experts. But being thus certain, it would seem to be their duty to the public to refuse to permit a public service corporation to bind itself to obligations which it would be ruinous for it to attempt to fulfill. It would appear to be equally unfortunate to award a contract to the lowest bidder when it seems certain that he would be unable to live up to the terms of the contract without bankruptcy.

## Typhoid in Chicago Decreasing

THE report of the Department of Health of Chicago for the first six months of this year shows a most creditable condition of affairs so far as typhoid fever is concerned. The typhoid death rates per 100,000 since 1903 have been as follows: 1903, 32.1; 1904, 20.2; 1905, 16.5; 1906, 18.3; 1907, 17.7. This general decrease has been continued. The rate for the first six months of 1908 (multiplied by two for comparison with the annual rate) was 14.2; and that for the first six months of 1909 (similarly doubled) was 12.6. The second six months usually shows about a 25 per cent higher rate than the first six; but allowing for this would give only 16.0 and 14.2 respectively as annual rates. The latter is just half the average of the rates for 1901 to 1905. The uniform decrease appears to indicate a continually improving condition as to general sanitation. There appears in this report, however, an indication of a lapsing of general precaution, in that, while in 1908 there were 1,755 cases reported and 153 deaths, or a fatality of 8¾ per cent, in 1909 there were 140 deaths, but only 1,039 cases, or a fatality of 13½ per cent. This would indicate that the physicians are either less skilful in curing the disease or more careless in reporting cases. We presume it is the latter; but this is too often a forerunner of more serious carelessness in other directions, such as disinfecting. We trust we are mistaken in this, however, and that neither physicians nor Board of Health are relaxing their vigilance.

## Tarentum Sued by State Board of Health

THE State Board of Health, a short time ago, sent to the Borough of Tarentum, Pa., a communication which would indicate the serious resolve of the Board to control stream pollution in that State. This borough had been ordered to prepare plans for a sewage disposal plant and to make no extensions to the house sewerage system before such plans had been accepted by the State Board and permission given. This order was not heeded by the borough, however, and in the communication referred to, Samuel G. Dixon, Commissioner of Health, said:



"Because the borough of Tarentum has extended sewers by permit issued by the Commissioner of Health under the provisions of act 182 of 1905, in which permit certain conditions and stipulations were made, the terms of which have not been complied with, thereby placing Tarentum borough in the position of defiance of the decree of the Commissioner of Health and the law of the Commonwealth, it has been unanimously agreed by the Governor, Attorney-General and Commissioner of Health that the matter be placed in the hands of the Attorney-General for the enforcement of the penal clause in said law against said borough, and I hereby notify the local authorities of the borough of Tarentum to this effect."

### MUNICIPAL BILLBOARDS

A QUESTION which has been raised in some cities, but which appears not to have occurred to the authorities in others, is whether a city should use billboards for advertising purposes. The only reason why it should not, of course, would be the bad example set in the light of the efforts being made by many municipalities to legislate them out of existence if possible. A short time ago the Board of Trade of the city of Rochester decided to advertise the city on billboards larger than any to be found in the vicinity. A protest was immediately received from certain citizens, especially in the form of a public letter from Charles Mulford Robinson, protesting against this, and the Board of Trade, in view of the objections raised, decided to abandon the idea.

Other cities, however, are using the billboards for booming themselves and the commercial advantages they offer. The advantages of this form of advertising were set forth in a resolution adopted July 8th by the Board of Trade, of Lockport, N.Y., in which it was stated that "The Boards of Trade in many cities and towns of western New York are causing to be erected billboards in full view of the railroad trains approaching their city, on which is attractively painted the population of their city together with its commercial advantages, intended to attract the eye of the public and those seeking factory locations and residences." The board at that meeting decided to appoint a committee to secure the erection of five billboards along the railroad tracks within one mile of the city, one on each of the lines entering the city.

One of the comments of the Rochester Board of Trade would seem to be pertinent to this matter. This was to the effect that if individual merchants were allowed to advertise on billboards, a combination of these, representing the city's commerce, should have a like privilege. If it was not proper for the representatives of the community, however, it must be equally objectionable when done by individual merchants, and all billboards should be abolished within the city limits.

Cincinnati's new billboard ordinance represents an advanced stand in this matter, and Commissioner West, of the District of Columbia, has recommended the adoption of a similar one for Washington. Cincinnati's ordinance is as follows:

Signs and billboards or any device in the nature of an advertisement, announcement or direction, when constructed of wood, shall not be erected over two feet in height.

All signs and billboards constructed in the fire limits, more than two feet in height, on any buildings or separately, shall be constructed entirely of metal, including the upright supports and braces of the same.

No signs or billboards erected upon uprights or any other supports extending into the ground shall be at any point more than twelve feet above the surface of the ground and shall be properly supported and braced.

Billboards shall have at least twenty-four inches of open space in height between the ground and the billboard.

There shall be an open space of six feet between each billboard and any adjoining structure or lot line.

There shall be an open space of not less than two feet between any two billboards.

No billboard shall exceed 500 square feet in area.

No billboard shall be nearer to the lot line on any street than the house line adjoining the same.

In no case shall any billboard be less than fifteen feet from such lot line.

When new buildings are erected present billboards shall be set back to such house line of adjoining lot.

All signs which are dangerous in any manner whatever shall be repaired and made safe or taken down by the owner.

No matter shall be posted on any such structure that is licentious or obscene or depicting the commission of any crime.

No matter shall be posted on any such structure until it has been inspected and approved by the superintendent of police.

It shall be unlawful for any billposter or advertising sign painter to post any matter upon any board owned or controlled by licensed advertisers without the consent of the advertiser or upon any building without the consent of owner of such building.

Fences of wood not used for advertising purposes shall not be more than ten feet in height and shall not be used for advertising purposes.

No such sign or billboard shall be erected on or facing any public park, square, municipal, county or federal building.

Nothing herein contained shall prevent the owners or operators of any open-air place of amusement or ball park wholly surrounded by streets, vacant grounds or railroad rights of way from erecting or maintaining suitable screens about the same in accordance with plans approved by the Commissioner (in charge of billboards), or from displaying proper advertising matter on the interior of such screen.

The foregoing paragraphs of this section shall apply to existing billboards.

### EXPERIMENTAL ROAD IN OHIO

AN experimental road is being constructed near Columbus, Ohio, by James C. Wonders, State Highway Commissioner. This will consist of sections, each 400 feet long, each section being laid with a different material or method. These being all laid successively along the same stretch, will presumably be subjected to the same wear. The several sections will be put down as rapidly as the companies offering their materials and methods for the test can be got to construct them. One stretch has already been laid by the Capital Construction Company, of Columbus, acting for the Continental Bitumen Company, of Toledo, the materials used being called "Carbovia," a mixture of coal tar and crushed stone. Other companies which have expressed their desire to lay other stretches of test road are the Standard Oil Company, the Wadsworth Impervious Product Company, the Good Roads Improvement Company, the Improved Roads Company, the F. G. Lewis Manufacturing Company ("Taroid"), the Petrolithic Paving Company, the Macadam Concrete Company, and the Robeson Process Company.

The Street Commissioner has general control of the work of construction, but representatives of the concerns laying the sections are permitted to superintend the work in order that there may be no ground for claims by any company that its section was not laid as it should have been. The road thus to be used is well drained and has already been "improved." The Commissioner expects to place signs along the road indicating the limits of each section and the name of the concern whose material is used on each. Although he has no authority to supersede the State law, it is generally understood that little effort will be made to restrict speeding on this stretch of road, as the desire is to give it the severest test possible.

### NEW YORK'S BUILDING CODE

ARCHITECTS, building constructors, and dealers in building materials in Greater New York have for weeks been agitated over a proposed building code, drawn up by the Board of Aldermen. The sections which furnished the chief bone of contention dealt with fireproofing material. It was claimed by many architects and by the cement manufacturers that the new code would exclude cinder concrete from all buildings as a fireproofing material, and that there was no justification for such exclusion. At a number of public hearings, which, contrary to precedent, were largely attended, arguments *pro* and *con* were offered by expert engineers, architects, and others. It was openly asserted that the code was intended to favor manufacturers of hollow-tile fireproofing who were friends of high officials in Tammany Hall. Finally the code was adopted by a majority of one. The Mayor hurried home from his vacation a day or two later, heard certain experts on each side, consulted with the Chief Engineer of the Board of Estimate, Nelson P. Lewis, and on July 23 vetoed the entire code. In addition to the matter of cinder concrete, the Mayor objected to the unusual provision that the code should take effect at once, which would, he said, work a hardship on contractors, material men, and architects.

## NEWS OF THE MUNICIPALITIES

Current Subjects of General Interest, Under Consideration by City Councils and Department Heads—Streets, Water Works, Lighting and Sanitary Matters—Police and Fire Items—Government and Finance

## ROADS AND PAVEMENTS

## Curb Setting to be Regulated

Altoona, Pa.—As a result of numerous complaints, an ordinance has been introduced in Councils requiring the inspection by the City Engineer's office of all curb that is set, its duties up to the present consisting of merely giving a certificate which covers lines and grade only, as curb contractors could not be compelled to conform to the paving specifications for concrete curb in the paving contracts, and property owners also were helpless unless they protected themselves by proper contracts.

## Paving Streets Under Gravel Road Law

Anderson, Ind.—John F. McClure, member of the Indiana Railroad Commission, as Special Judge in the Madison Circuit Court, has ruled against this city in its complaint for injunction against paving of streets under the three-mile gravel road law. City Attorney Ryan argued that the law only permits of gravel and stone for road or street building. Judge McClure upheld that part of the statutes providing that street paving materials shall not be used except upon streets within corporate limits of cities and towns. The Court decided that paving material means brick, asphalt or block as well as gravel and stone.

## Invents Glue-Macadam Road

Little Falls, N. Y.—A new method of paving roads has been invented by J. P. Sweeney, of Little Falls. It consists in the use of a specially prepared glue as a binder for macadam roads. It is stated that tests made by the Highway Commission have given satisfactory results. Mr. Sweeney estimates that this preparation can be applied to macadam roads for \$800 to \$1,200 a mile. Patents have been applied for and a corporation of Utica, Rome and Syracuse capitalists has been formed.

## Remedy the Dripping of Oil on Streets

Perth Amboy, N. J.—A nuisance that has been complained of by many citizens as well as the police, and one that has been the cause of ruining much clothes, has been abated, reports Superintendent Hufnagle of the Public Service Corporation. It was caused by the dripping of thick, greasy oil from the iron transformers situated on the top of electric light poles along Smith and State streets. These transformers, which are used to reduce electric light current, do not usually leak, but the extensive heat the past few weeks caused the oil in them to boil, says Mr. Hufnagle, and that burned the insulation off the wires leading into them. The destruction of the insulation caused oil to run out along the sides of the wires and drip on passing pedestrians.

## Newburgh Streets Sprinkled with Oil

Newburgh, N. Y.—The work of sprinkling with oil on Grand street between Second and Catherine streets has been commenced. The oil used is what is termed asphalt oil. The two blocks are to be thus sprinkled, after which Second street from Grand to Liberty, and Third street from Grand to Liberty are to be sprinkled in a similar manner. There is absolutely no dust blowing in that part of Grand street treated with oil.

## Oiling of City Highways Forbidden

York, Pa.—Permission was refused citizens of Linden avenue to oil the streets in order to settle the dust, notwithstanding that they were willing to bear the expense. Chairman Rose, of the Highway Committee of the City Council, predicted trouble providing it was permitted; Mr. Bahn, of the same committee, said it should be stopped for the sake of the horses, as the mud and oil stick to their feet, and Mr. Shearer, another colleague, asserted that "it eats the hair off their hoofs," while Mr. Bahn added that it also made their feet sore and added that salt on the street car tracks had taken the paint off vehicles in the winter, and he opposed any further innovations.

## Load Limit on Wet Roads Sustained

Marysville, Cal.—Nine cases appealed to the Superior Court from the court of Justice Seward several months ago have been dismissed and nine fines of \$50 each paid. This was the result of the decision by Judge McDaniel upholding the validity of Yuba County's road law, which limits the loads that may be hauled during the winter and spring to 3,500 pounds. Nine teamsters were arrested and fined by Justice Seward, and one case was appealed to the Superior Court, the validity of the law being attacked. All persons will now have to obey the law, which was enacted to prevent the roads being cut up during the wet season.

## When State Must Pay for City Roads

Oneonta, N. Y.—Where the improvement of a county and town road has been authorized, and during the construction work the road becomes a portion of a city, the State is required to bear its proportion of the expense according to an opinion rendered by Attorney-General O'Malley to the State Highway Commission. When the city of Oneonta was created a road had been ordered which, under the charter, became a city street. The Attorney-General holds that the preliminary work established contractual relations between the three parties which were not abrogated when the Legislature created the city.

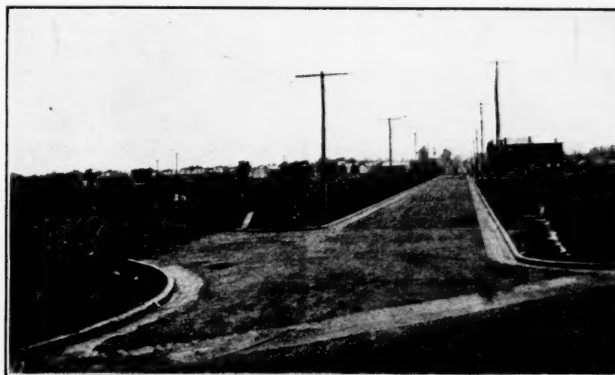
## Cement Curb and Brick Gutters for Trenton's Streets

Trenton, N. J.—The practice of improving streets by laying cement curb in place of bluestone has been adopted in Trenton and is much favored by property-owners. Hitherto stone curbing, Pennsylvania bluestone, has been used.



LIBERTY ST., LOOKING NORTH FROM LALOR ST., TRENTON, N. J.

The picture above shows Liberty street as it was and the one below with the macadam pavement with concrete curbs and brick gutters. It is proposed to use this same material on Murray street, where the improvement has just been started. The bids for this curb and gutter material are the same as for the vitrified brick gutters with the old bluestone reset, thus insuring a brand new curb for the same price as the old.



Courtesy of the Trenton Advertiser

SAME VIEW: MACADAM PAVEMENT, CONCRETE CURB, BRICK GUTTERS



### Expansion Joints Bring Clash of Officials

Salt Lake City, Utah.—If H. G. McMillan, Chairman, and C. D. Rooklidge, member of the City Board of Works, have their way P. J. Moran, a well-known city contractor, who has been doing some work on Main street, will receive no pay for that work, nor will it be accepted by the Board until he puts in expansion joints between the curbing and new sections of concrete sidewalk which he has laid. The Board now has under consideration a resolution to that effect. The trouble arose over Main street paving, though there has not been the best of feeling between the Mayor and Council and City Engineer on the one hand and Chairman McMillan and some of the members of the Board on the other. Mr. McMillan ordered Moran to leave a space between the curbing and the new sections of sidewalk going in, for the expansion of the concrete. When the City Engineer discovered that this order had been made he took the Mayor around and showed him that this was unnecessary with concrete laid in hot weather, as it would contract with cold weather and only expand again to its original position. The Mayor ordered Moran to cut out the space for expansion. Then Mr. McMillan hunted up Mr. Rooklidge for moral support and gave several different orders which Moran and his superintendent, Frank Gawan, refused to recognize, the latter saying that he could not read when handed the written formal order of the Board. It is the first time Mr. Moran has failed to respect the orders of the Board. The matter is likely to cause a deadlock between the Mayor and Council and Board of Works. If the latter refuses to pay Moran and accept the work the Council almost unanimously is with the Mayor in taking it over without sanction of the Board.

### Courts Decide Against Buffalo Speedway

Buffalo, N. Y.—The Appellate Division has handed down a decision overruling the decision of Justice White in special term and dismissing the city's demurrer to the suit of certain property owners on Oak Grove and Loring avenues to make the city open up those avenues across the Humboldt Parkway Speedway. This decision was not unanimous, one judge dissenting. It means that the city will probably answer to the complaint. The actual named defendants in the proceeding are the Park Commissioners. The property owners seek to compel them by mandamus to extend the avenues mentioned across the Speedway. This would result substantially in closing the Speedway for speeding purposes. The Park Commissioners may answer the allegations of the writ if they desire, but the land owners are in hopes that the establishing of the law applicable to this case by the Appellate Division will end the litigation and restore to them their rights in the two public highways involved, especially as this matter has now been before the courts intermittently for about 10 years, though never authoritatively passed upon until the present time.

### Dayton's Specifications in Demand

Dayton, O.—That Dayton has street paving specifications that are attracting attention of other cities throughout the United States is strongly attested to by the large number of letters of inquiry being received by City Engineer F. J. Cellarius. Especial stress is laid upon that provision which requires a most rigid brick test before the blocks can be laid in the street. The feature that is attracting special notice is that which provides for a test of brick for a contractor before his brick is unloaded from the car. This will be done by the city if four hours' notice is given by the contractor. If the brick is not up to test this saves the contractor much money in unloading. An inquiry regarding these features was received from N. S. Sprague, Secretary of the Board of Public Works of Pittsburg, Pa. They are having a lot of trouble there and desire to adopt, if possible, the Dayton specifications.

### Walks Crumble; Ask Board Not to Accept Them.

Indianapolis, Ind.—Residents of Bancroft street, from New York to Michigan street, have asked the Board of Public Works not to accept the cement walks recently placed in the street until extensive repairs have been made. It is charged that the walks were not built according to the specifications and are so inferior that the concrete could be crumbled between the fingers. The question has been referred to City Engineer Blaine H. Miller.

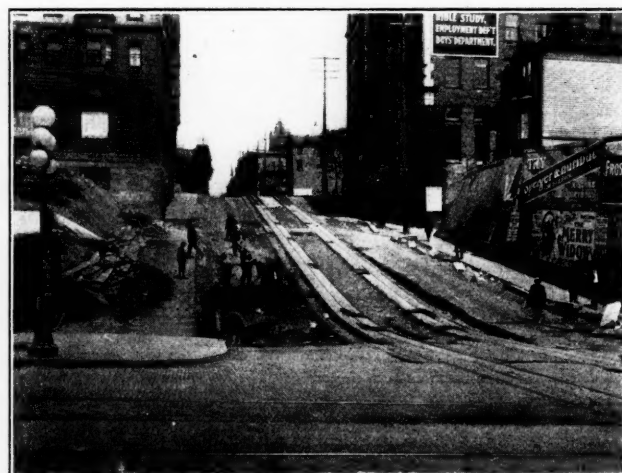
### Asphalt Depth to be Measured by City Engineer

Long Branch, N. J.—On account of the general and continuous dissatisfaction on the part of citizens and taxpayers with the repairs made by the Barber Asphalt Company, and, as there is at present a general belief that the said company has not left the asphalt on the streets as per contract, viz: 75 per cent of its original thickness, the City Council, in order to safeguard the interests of the city, has decided to temporarily withhold the \$10,000 bond of the company, and has further

Resolved, That the City Engineer, under the supervision of the Street Committee, be directed to make an actual and accurate measurement of the thickness of the asphalt every ten rods throughout the entire extent of pavement covered by the maintenance contract, by making three drillings through the asphalt, to the concrete, on a line at right angles to the curb line, one drilling to be made ten feet from each curb and a third drilling on the same line, midway between the two former, and that an accurate record of each drilling be made, and that an average of all the drillings be made and reported by the City Engineer to the City Council at its next regular meeting.

### Long Delay in Regrade Work

Seattle, Wash.—After having been closed for over a year and a half, Madison street, between Third and Fourth avenues, is about completed. It is one of the principal arteries of the section, and it is estimated by the business men in the section that they have lost upward of \$75,000 by delays which they charge up to the Engineering Department of the city.



Courtesy of the Seattle Times

STREET TORN UP FOR EIGHTEEN MONTHS, SEATTLE, WASH.

ment of the city. The manager of the Lincoln Hotel, located on the street, claims the place has lost at least \$50,000 in receipts; the Y. M. C. A., which moved into its new quarters just after the work was started, has suffered financially, and it has been declared by a former manager of the street railroad, that an accident on the Madison street line about a year ago, in which a number of passengers were severely injured, was due directly to the condition of the tracks, which were elevated on trestles to a height of about nine feet on the block. It had been hoped to complete the work by September 1 of last year, but it was found utterly impossible to use a force of one hundred men, and on October 1, when the contract called for the completion of the work, an extension of time was granted the contractor, on the recommendation of the Engineer.

### City Takes Over Care of Streets

Macon, Ga.—The city of Macon has assumed control of all the streets in Huguenin Heights that are located within the territory annexed in 1903. To make the transfer legal in all ways, Alderman J. E. Hall offered a resolution asking that the survey just completed by Civil Engineer C. A. Caldwell be accepted. Council was unanimous in passing the resolution. The adoption of this measure places the city in control of the streets and the city is now obligated to keep them in repair. Heretofore the streets, lanes and alleys were under the care of the county and all repair work had to be done by the county chain gang. The survey made by Engineer Caldwell shows the location and width of all the streets and also gives the name of each of them.



## SEWERAGE AND SANITATION

### Health Conditions Excellent in Chicago

Chicago, Ill.—According to the report of the health officials of the city, better conditions have never prevailed in Chicago at this season of the year than at present. The death rate as well as the sick rate is reported greatly reduced. Prevailing weather conditions and the work of the Health Department and of bodies co-operating with it for the preservation of health and the improvement of sanitary conditions are named as the principal.

### New York City's Death Rate Continues Low

New York, N. Y.—The Health Department mortality report for the week ending last Saturday gives the rate as 15.97 per 1,000 of population, as compared to 18.48 in the corresponding week of 1908. This year there were 1,397 deaths, last year 1,567. The greatest decrease was in infant diseases.

### Typhoid at Gary Due to Milk

Hammond, Ind.—Typhoid fever is prevalent at Gary. Dr. T. W. Templin, the Health Officer, traced the source of the disease to milk shipped from Miller station and McCool dairies, where farmers were found to have children sick with the fever.

### Carolina Poplars Clog Sewers

Lexington, Ky.—The storm sewer on East Fifth street, which has given a great deal of trouble, is being cleaned. The sewer became choked by the roots of the trees which grow on the side of the street, and an immense amount of labor is required to clear the passage. The most troublesome kind of tree is the Carolina poplar, which has long matted roots that force themselves into the channel and hold all sediment that would otherwise be washed out of the city. These trees are not only troublesome on Fifth street, but wherever they grow in the vicinity of a sewer, and Lexington is one of the few cities that allow them to grow along the public streets and driveways.

### Objects to Sewer Laterals

San Bernardino, Cal.—It will probably take a lawsuit to enforce the payment for the sewer work to be done under the contract let for the construction of a sewer on Base Line, A, Eleventh and B streets. It seems that every one is not satisfied at the ordering of the work because of the fact that included in the order was one that a lateral was to be run to every 50-foot lot along the line of the sewer to be built. Some claim and state that they do so on the authority of an attorney that the Council has no power to demand that sewer connections be made every 50 feet, or anywhere else, where there is no building to connect, one man saying that fully 75 per cent of the property on the line of the sewer is still vacant. City Attorney Swing states that the law is emphatic in giving them such authority whenever the Council sees fit to declare it a necessity. The idea in ordering it done is to prevent the tearing up of the pavement that is to be laid under the bond issue, and he is positive that the law allows such a course to be taken when it is deemed necessary.

### Conference of Mahoning River Cities

Warren, O.—Dr. C. O. Probst, Secretary of the State Board of Health, has sent letters to the various municipalities along the Mahoning River inviting the Mayor, members of the City Council and other representatives to attend a general meeting at Warren on August 5. During the past year the State Board has conducted a series of investigations of the Mahoning River, with special reference to questions relating to public water supplies and the disposal of sewage and other wastes, and it is desired that the questions be freely discussed by those most interested and an outline given of the general policies to be carried out.

### Anti-Expectorating Ordinance in Butte

Butte, Mont.—The City Council has finally passed the anti-expectorating ordinance and the police have been given stringent orders to enforce the measure. The officers of the Woman's Club, the Art Club, the Homer Club and West Side Shakespearean Club are supporting the officials.

### City Has Model Smokeless Plant

Indianapolis, Ind.—An inspection of the City Hospital power and heating plant has been made by Smoke Inspector Brown, who said it is the model smokeless plant in the city. He said that, although the cheapest grade of coal obtainable is being used, the plant is complying with the city anti-smoke ordinance in every respect. The plant uses a patent automatic stoking device, which feeds the coal in slowly. This, with the careful work of the firemen in charge, is said to eliminate all smoke. Cheap grades of coal are used exclusively, according to Inspector Brown.

### Abating Smoke Nuisance at Power Station

Newark, N. J.—Daniel Maloney, the city's Smoke Inspector, has received a letter from Mr. Whittlesey, Engineer of the Public Service Corporation, concerning experiments made with coal at the power station on River street with the object of diminishing the smoke nuisance there. About a year ago all the furnaces connected with the two brick chimneys were equipped with the Rooney stokers, and since then they have given out comparatively little black smoke. It was said at that time that to the fifteen hand-fired boilers connected with the steel stack the Rooney stokers were not applicable, and that these boilers would be taken out and improved ones be installed in their places. For several reasons it has since been decided to retain them, and lately tests have been made with different kinds of coal in the furnaces. Mr. Whittlesey says it has now been decided to equip these hand-fired furnaces with special grates and blowers for burning anthracite or hard coal. It is proposed to use a mixture of fine anthracite with soft coal, in the proportion of 80 per cent anthracite to 20 per cent of bituminous. Mr. Whittlesey said the installation of new grates and blowers would be completed about five weeks hence, but Mr. Maloney does not expect the change before September 1. The Smoke Inspector said there has been a considerable abatement of the smoke nuisance at the power house, and especially since the coal experiments were begun about a month ago. He thought the condition, as far as the brick chimneys go, quite satisfactory. There is a probability, he added, that the use of the hard coal will result in the emission of ashes from the chimneys.

### Railroad Testing Smokeless Engine

Bay City, Mich.—The Louisville & Nashville Railroad has the installation of smokeless engines under consideration as the result of the development of a device by an employee of the company named Anderson, and has four engines equipped with it. It is a modification of the well-known steam jet apparatus. It injects live steam in the form of spray over the entire firebox, and at the same time a deflector on the box door throws the smoke that escapes back into the steam. Two steam sprays in the smoke box at the base of the stack bleach any smoke that gets that far. Except when the engine is freshly fired, there is said to be no smoke at all when the apparatus is used. If it proves a success in these it will be installed throughout the system, large Southern cities receiving particular attention.

### Work of Anti-Smoke Law in Grand Rapids

Grand Rapids, Mich.—William Happ, Chairman of the Cleaner City Committee of South Bend, Ind., sent out a number of inquiries to Grand Rapids firms in reference to the smoke nuisance, and what they did to dispense with it, the following being the list of questions sent to each firm:

What style of device are you using?  
How long has it been in use?  
Does your chimney smoke?  
What was the cost of the device installed in your plant?  
What is the size of your boilers?  
What is the saving, if any, in smoke consuming or some prevention appliances?

All but one replied that smoke consumers were eminently satisfactory. All declared that their chimneys were practically smokeless, at least 80 per cent of the smoke being consumed. From 10 per cent up was saved in fuel by the adoption of the smoke consumer, and the saving was greater in one case where a cheaper coal was substituted. Others reported that the only time the smoke was especially noticeable was when fresh fuel was being used. In no case was the cost of installing the appliance excessive. Another firm reported that, even though it did not save anything in the way of fuel, it complied with the smoke law and had done satisfactory work for two years.

## WATER SUPPLY

### Municipal Pipe-Making Plant

Buffalo, N. Y.—A municipal plant to manufacture water mains is provided for in a resolution introduced in the Board of Aldermen by Alderman Kennedy, who urged that an investigation be made into the feasibility and cost of such a plant in order to bring the "pipe trust" to terms. It was asserted by the author of the measure and Alderman Sullivan that the United States Cast Iron Company has failed to deliver water pipe to the city in accordance with the terms of its contract; that important work on the city mains has been greatly delayed in consequence, "prolonging the time when the city will be adequately supplied with mains and continuing the insurance rates on a high level," and spoke also of the poor quality of pipe that has been offered the city. Alderman Brooks, chairman of the Water Committee, has already instituted an investigation and will give hearings.

### Wanted Increased Charges; Compelled to Lower Them

Charleroi, Pa.—In discussing terms for a proposed new contract with the borough, Superintendent Pollock, of the Charleroi Water Company, proposed increasing the charge for testing meters, in addition to that for installing them, from \$1, which has been paid for years, to \$1.50. Instead, however, a proposition was made by members of Council that the amount be reduced to 75 cents, and this amount was accepted by the water company.

### Wasteful Patrons Cut Off From Water

Dallas, Tex.—More than a hundred patrons were cut off from the water connections in one day because of alleged waste after warning from the city officials. The police arrested several persons who had previously been warned against sprinkling and other waste. There was a falling off of more than a million gallons in the pumping, yet the consumption is declared to be far in excess of what it ought to be. The filling of the water wagons from the City Park is estimated to have saved probably 500,000 gallons formerly used for street sprinkling.

### Water Test at Lockport

Lockport, N. Y.—The water works system, which was recently improved, was tested by order of the Common Council July 19, and, as had been anticipated, quite a number of leaks occurred in the mains. The standpipe was shut off and water pumped direct into the mains, giving a pressure of 100 pounds at the City Building for five hours. Citizens also shut off their service mains to avoid possible damage by the pressure. A test was made on Main street with four streams, each from 150 feet of hose, at a pressure of 48 pounds; at Mill street, with two 150-foot sections of hose, the pressure was 80 pounds at the nozzle; at the Kenmore Hotel it was 58 pounds with one stream in action, while at the Niagara Paper Mills it was 137½ pounds, and at the Traders' Paper Mill 135 pounds during the test. At the City Hospital with 150 feet of hose, the pressure was but 36 pounds, as the 6-inch main there is fed from a 4-inch main further west. Many of the old service pipes broke, as had been expected, the big Gillespie main sprung several small leaks and ten leaks were discovered on the following day. Leakage is continuing just as it has been for the past two months and big gangs of workmen are kept busy repairing all breaks reported to Superintendent Peterson.

### Factories Must Use Small Mains

Dayton, O.—A new policy has been adopted by the Service Board respecting the installation of water services in factories and other buildings in the city where sprinkler systems are being installed. The Board decided not to give a main larger than 6 inches. Charles A. Herbig noted the fact that on Fourth street, in the business center of the city, a 4-inch main supplied all consumers. Some factories have been demanding 8 and 10-inch mains. This calls too heavily on the water works pumping station, it is said. Chief Ramby of the Fire Department was called in and also took the same stand. The case came up when the Aull Brothers Paper Company wanted an 8-inch main run into their factory off of Dutoit street. It was refused.

### Filtration Kills Disease

McKeesport, Pa.—There is not a case of typhoid fever from the city in the McKeesport Hospital. In the entire Tube City there are not half a dozen cases. The few cases being treated at the hospital are all from the surrounding towns, where well water is used. Ever since the beginning of operations at the McKeesport filtration and water softening plant disease in the city has been on the wane. At this season last year more than thirty cases of typhoid from the city proper were confined in the hospital.

### Niagara Falls Wins Water Works Protest

Niagara Falls, N. Y.—By decision of Attorney-General Edward R. O'Malley the city wins over the State Water Supply Commission on the appeal taken by the city against the ruling that the city must accept the condition of liability for direct and indirect damages to the Niagara Falls Water Works Company in constructing a new municipal plant. The rehearing was held in Albany, Corporation Counsel Mackenna appearing for the city.

### Assessed Valuation Raised; City's Expert Barred

Oconto, Wis.—George W. Nistle, the city's expert engineer, when about to enter the plant of the Oconto Water Supply Company, found all the doors and windows barred, and he was informed from within by the stationary engineer that he was instructed by the company's management to allow no one to enter. The water consumers here are much chagrined, for they think that such public utility plants should be open to the inspection of any one during reasonable hours. The Assessor raised the valuation of the plant from \$90,000 to \$150,000, and the Board of Review has just appraised the Oconto Water Supply Company's management of this change of valuation.

### New Water Supply Tested

Patchogue, L. I., N. Y.—A semi-official test of the new water supply for fire service shows that Patchogue has one of the best services on the island. Superintendent C. G. Sands of the Great South Bay Water Company, which furnishes Patchogue, Sayville and adjoining villages with their water supply, had charge. With four streams playing through 200 feet of regulation fire hose and through a 1½-inch nozzle at each line, there was a pressure of 75 pounds at the hydrant at the corner of Ocean avenue and Church street. With six streams playing there was a pressure of 50 pounds at the hydrant. At one time the hydrant pressure reached 85 pounds, and as the final stream was turned off the hydrant showed a pressure of 81 1-5 pounds. The official test under the inspection of the village authorities and the representatives of the water company, in compliance with the new 20-year contract between the village and the water company, will probably be made in the near future. Former Mayor David A. Boody of Brooklyn is president of the Great South Bay Water Company.

### City Must Reduce Assessment or Pay for Water

Racine, Wis.—The possible refusal of the Board of Review to cancel an increase of \$40,000 in the assessment of the Racine Water Company may cause the company to discontinue free service to the city, amounting to about \$15,000 annually. The assessment was increased from \$460,000 to \$500,000 this year, and the company made an appeal to the Board of Review which amounted to a threat. The company maintains that they are not required by law to furnish water free to the city institutions, and they request that their assessment be left at the figure of last year.

### City Water to Pass Amid Gold

Randsburg, Cal.—The water supply of Los Angeles from the filtered snows of the Owens Valley will wind through strata of gold. Part of the aqueduct is heavy with veins, and in a number of cases pockets of gold have been taken away. Laborers fight for some parts of the construction work, because of the chance of striking a pocket. From one stretch of the excavation less than 12 feet long samples of high-grade ore were taken, which in some instances show assays of \$900. The aqueduct will cross a bed of placer gold and also go through lodes. All sorts of stories are to be heard along the aqueduct regarding gold finds. It is said Patrick McCullum, a Los Angeles laborer, realized \$1,200.



## STREET LIGHTING AND POWER

### Lights Will Burn, Although City Cannot Pay

Charleston, W. Va.—Notwithstanding that the Board of Affairs of the city ordered all street lights cut off to avoid a deficit which would render the city officials liable to imprisonment, as stated last week, the Kanawha Light and Water Company, through its president, George F. Maddock, declines to carry out the order. In a letter to the Board Mr. Maddock states that in view of the danger and distress which might ensue, the company is willing to keep them burning for a reasonable length of time, so the citizens may have an opportunity to make some definite arrangement. The company also announced that it would also continue in use forty fire plugs ordered cut off, as it would unduly endanger the lives and property of citizens to reduce the fire service by one-third at this time.

### Reduction in Rates in Chicago

Chicago, Ill.—In accordance with the provisions of its ordinance, the Commonwealth Edison Company, of Chicago, announces a reduction in rates, effective August 1. On and after that date all lighting bills computed from meter readings will be made out at a net charge of 6 cents a kw-hour for the low-rate portion, allowing 1 cent per kw-hour for payment within 10 days. This is a reduction from 7 cents. The primary charge will remain as before. It is computed that the percentage of reduction on the average total bill will range from 5.3 per cent for two-hour-per-day users to 13.3 per cent for 24-hour-per-day users. The general average reduction is about 6½ per cent.

### Seven-Cent Light Rate Fixed by Council

Columbus, O.—The Columbus Railway & Light Company has accepted the ordinance of the City Council fixing the rate to be charged for electricity for the next five years at 7 cents per kilowatt-hour. The company accepts all the terms laid down in the ordinance, which means that there will be no contest in the matter, and the rate for electricity in Columbus is settled until 1914.

### Baltimore to Test Electric Meters

Baltimore, Md.—The ordinance authorizing the testing of electric meters in the same way gas meters are now tested has been signed by Mayor J. Barry Mahool. It provides that the Superintendent of Lamps and Lighting shall put the inspection into practice as soon as practicable, and not later than October 1 in any event. R. J. McCuen, the Superintendent, is delighted with the passage of the ordinance, as he is responsible for it, and took a great deal of pains in getting the information as to what other cities were doing along this line. He is convinced now that he has the best ordinance in the country. The ordinance provides for the compulsory inspection of all electric meters before installation, and a charge of ten cents for each meter is imposed for this service. On complaint of a patron an inspection will be made at any time, and a charge of \$1 is made, to be borne by the company if the error is ascertained to be more than 4 per cent and by the patron if less. New machinery will be purchased and James M. Baggett will be promoted to Chief Electrical Inspector.

### Lighting Committee Discharged for Transgressions

Methuen, Mass.—At a special town meeting it was voted to discharge the members of the lighting committee and to abolish the several positions connected with the same. At the last special meeting \$300 was appropriated for the installation of seventeen lights in the Riverdale district, but the committee, using its discretion, installed only eleven lights and left the balance of the funds in the town treasury. After several votes, it was decided that the committee acted without authority and it was voted out of office.

### Municipal Gas Plant Pays

Paulsboro, N. J.—The June statement of the gas committee of Borough Council shows that during the month the receipts of the municipal plant amounted to \$349.50, which paid the running expenses and interest. The receipts will be greatly increased hereafter, as the water company will run its plant with gas.

### Unused Poles Must Be Removed at Once

Wilmington, Del.—The street and sewer directors have ordered the immediate removal of all unused telegraph, telephone and electric light poles.

## FIRE AND POLICE

### Morning Tests for Fire Department

Altoona, Pa.—Daily tests are to be held by the Fire Department in the morning at 8 o'clock hereafter, instead of at 7:15 in the evening, which practice has been in vogue since the installation of the paid department. The change has been made by Chief Alleman, as it has often been necessary to work in darkness when any trouble has been discovered with the electrical system, while now repairs can be made by daylight.

### Will Not Separate Fire and Street Departments

Beverly, Mass.—The City Council, by a vote of 9 to 7, refused to pass an ordinance separating the Fire and Street Departments.

### Piqua to Lose Sanitary Cops

Piqua, O.—Some weeks ago the police force of this city was reduced from seven to three men on account of economy made necessary by voting the saloon out, but the greatest surprise of all came last week, when the semi-annual appropriation ordinance was introduced and it was found that there had been no provision made for sanitary policemen. This means the abolishment of this department. The Health Officer will of necessity be his own policeman, too.

### Red Lights for Pasadena Police

Pasadena, Cal.—Red lights will be established all over the city for the benefit of the Police Department in the near future if the City Commissioners grant recommendations to be made by Chief of Police H. H. Favour. In the station now there is a light and telephone for the purpose of demonstrating the appliance. It is the invention of Manager John D. Holmes of the Home Telephone Company. The telephone is just like those in the police boxes throughout the city. Adjoining it on a panel is an incandescent light with a red globe. By plugging in at the switchboard the light is turned on. If the system is installed, the several lights on one beat may be plugged in at once, thus calling an officer to the nearest box. At present the Desk Sergeant must wait until a man calls in before issuing orders. As a motorcycle brass plug fits the holes in the switchboard, it would be possible to call every police box in the city at once by having a number of these plugs, thus concentrating the force at a moment's notice.

### New Police System at Portland, Me.

Portland, Me.—The new police system has gone into effect and everything is running smoothly. Chief Dresser will go to Boston and other Massachusetts cities to see how the Police Department is conducted and especially how Sergeants of Police, the new grade created here, can be made to help to keep the department running smoothly. The best feature of the new system is that it will give every patrolman the feeling that if he is faithful and shows himself to be a good and intelligent officer he will stand as good a chance of promotion as anyone else. Patrolman Thompson was appointed Senior Captain by Mayor Leighton.

### Rooting Police Force Suspended

Chester, W. Va.—This is a "copless" town and Constable Hiram Allison is the only man lawfully wearing a star on his breast now. All policemen have been suspended by the Council, for they were lovers of baseball and the Councilmen decided the force should be watching over the public instead of rooting for the East Liverpool O. & P. team. The Council held an executive session and Mayor Frank Chapman was told to suspend Chief of Police James McKinnen and the rest of the force.

### Weekly Tests of Alarm System

Chico, Cal.—The Chico fire alarm system will be tested out at noon each Saturday henceforth by turning in alarms from various boxes. The fire whistle will blow when a fire is actually in progress. This is to determine at regular intervals whether the system is in order.

### Useless Fire Alarm Boxes

Portland, Me.—Chief Eldridge has thirteen boxes on his fire alarm circuit that have never been rung.



## GOVERNMENT AND FINANCE

### Commission Plan Defeated

Fargo, N. D.—By a vote of 868 to 967 the advocates of the commission plan of city government were defeated, July 22. The vote was light in the majority of wards, especially in the residence districts. Another election in favor of the commission form cannot be held for four years. The scenes accompanying the election were not particularly edifying, wagonloads of noisy men and cases of beer figuring conspicuously.

### Street Numbering and Weight and Measure Law

Dallas, Tex.—House numbering is to be taken in hand by the Board of Municipal Commissioners and the entire city renumbered on some basis for block and distance consideration, the parallel streets having as nearly as possible corresponding numbers in corresponding blocks. The Board has appropriated \$3,500 for expenses for the work. An Inspector of Weights and Measures is provided for in the annual budget just passed, though the ordinance creating the office is not yet drawn, and it is expected that it will be two months more before the appointee will be installed and at work. The position is to pay \$1,000 per annum.

### City Council on Strike

Fort Scott, Kan.—The City Council is on strike, as four members refuse to attend meetings, which prevents Mayor Brooks from having a quorum. The trouble came about when the Mayor relieved City Engineer Strode from office and appointed Will McElroy in his place. The Council voted down a motion to receive Strode's resignation, and efforts to hold a meeting have failed. Mayor Brooks threatens mandamus proceedings to compel the obdurate Aldermen to come to meeting.

### Election Invalid—Polls Closed at 5 Instead of 6 o'Clock

Fresno, Cal.—Through a decision rendered by Judge Church of the Superior Court, overruling portions of a demurrer of the City Attorney to a suit for recount filed by Harry P. Black, a local saloon man, the recent election, wherein it was voted to close the saloons in Fresno, is declared invalid because the polls were closed at 5 o'clock instead of 6. The city charter provided that the polls should close at 5, and the City Attorney so advised. According to Judge Church, this is in conflict with the State law. The same reasoning which invalidated the saloon closing would invalidate the election of Mayor and Trustees, only the time for raising that point has elapsed.

### Pittsburg Mayor Approves City Depositories

Pittsburg, Pa.—Mayor William A. Magee has taken action which shows that he does not hold with former Mayor George W. Guthrie that because there might have been fraud in the passage of the ordinance selecting six city depositories, therefore the ordinance was null and void. The Mayor has signed contracts with the Workingmen's Savings and Trust Company and the German National Bank of Allegheny, designating them as city depositories. The four other banks named by the ordinance have been serving as city depositories, not by virtue of the ordinance rejected by Mr. Guthrie, but because they were previously city depositories, and Mr. Guthrie and Comptroller E. S. Morrow continued them in service, as otherwise there would have been no place for the city to deposit its funds. Mayor Magee's action was foreshadowed by the opinion of City Solicitor Charles A. O'Brien, who said the ordinance was legal. Mayor Guthrie's City Solicitor, W. B. Rodgers, disagreed with his chief and told the former City Treasurer, John F. Steel, that the ordinance was perfectly valid. Comptroller Morrow will recognize the new depositories.

### District of Columbia to Purchase Supplies Separately

Washington, D. C.—President Taft has rescinded an order previously issued requiring the purchase of the District's supplies through the general departmental supply board. This action follows a visit to the White House of Commissioner H. L. West, and tends to preserve the integrity of the District of Columbia instead of making it a department of the Federal government.

## REFUSE COLLECTION AND DISPOSAL

### Butler Collecting Its Own Garbage

Butler, Pa.—J. W. McKee, of the Butler Garbage Company, has withdrawn his teams from the service of collecting the garbage and this leaves the borough with only a single team, owned by William Johnston, in the business of caring for the garbage of the town. Two weeks ago the garbage was left uncared for, as the furnace was being repaired, and the Council refused to accept a proposition of Mr. McKee to pay him \$900 for his team and two wagons. As a result he withdrew his teams from service. Health Officer Robert B. Fowzer is busy preparing to start in the garbage business.

### Ultimatum to Garbage Company

Long Branch, N. J.—The City Council, by a vote of 12 to 1, has directed the Board of Health to proceed against the Atlantic Coast Sanitary Company and its successor, the Sea Board Utilization Company, to compel the abatement of the nuisance at the crematory plant. It was also voted to give the sanitary company a week's time to improve its system of collection of garbage, failing in which the city is to employ teams and make collections during the remainder of the contract term and charge the same against the bond of the company.

### Take Garbage Up at Night

Perth Amboy, N. J.—Commencing on August 1 all garbage collections will be made during the night. This is the edict of the Health Board, following a conference with the garbage collectors. Garbage cans will not be allowed on any of the city's streets during the daytime and residents will not set out their cans before 8 o'clock nights. The garbage men will start collecting about 9 o'clock p. m. and do not expect to continue after 6 o'clock mornings. The new system will necessitate the addition of one or two more wagons, it is said.

### New Garbage Plant a Necessity

Youngstown, O.—The city must soon purchase a new site and erect a new garbage disposal plant, according to a report made to City Council by A. J. Miller, Director of Public Service. In his report Director Miller said that the present plant is rapidly being outgrown and he explained that property in the neighborhood of the present plant is increasing in value to such an extent and property owners are objecting so strenuously to the plant that it will have to be moved in a very short time.

### Acceptance of Incinerator at Winnipeg

Winnipeg, Man., Can.—The suit of the Decarie Manufacturing Company against the city of Winnipeg, which involves the acceptance of the Decarie incinerator, built in August, 1907, was begun on June 15 before Justice Metcalf, of the Court of Kings Bench, Province of Manitoba. The case continued to July 14 and was adjourned by reason of the end of the Summer term of court to October next. A large number of witnesses were examined on both sides, the evidence filling several thousand pages of manuscript. On the last day of the term a survey of the incinerator was personally made by the Judge, as reported in the "News Bulletin," Winnipeg, of July 15: "At the adjournment of the trial of the Decarie Incinerator Company against the city of Winnipeg, Wednesday afternoon, a visit was paid to the incinerator building with an object of inspecting the plant and taking a general view as to its appearance now and getting an acquaintance with the different parts of the apparatus and the manner in which it is operated. The inspection lasted about two hours, during which time His Lordship, Justice Metcalf, was shown all over the plant and building. The counsel in the case, Messrs. J. A. M. Aikens, K.C.; C. P. Wilson, K.C.; C. H. S. Blanchard, representing the plaintiffs and Messrs. Isaac Campbell, K.C., City Solicitor Hunt, J. E. O'Connor, J. Auld, three New York engineers, Messrs. Morse, Featherston and Koyle, and W. F. Perkins, court stenographer, Walter McGhee and Health Inspector Pierson made up the examining party."

## RAPID TRANSIT

### Dallas Installing P-A-Y-E Cars

Dallas, Tex.—At least two new cars of the pay-as-you-enter type, double trucked and ready for the discharge of passengers from either the front or the rear platform, are expected in Dallas in a short time. It is possible that before the fall season begins there will be several others of this type fresh from the shops. Meantime, at the shops of the Dallas street railway system, workmen are engaged in changing some of the local cars of the old type into the new kind, which will require that the person entering shall pay at the door. Manager E. T. Moore hopes by September to have the new type of car installed on at least one of the lines of the city. The cars are to be of the latest type, seats to hold two passengers each, and with a center aisle between seats.

### Chicago Railways Dupe City

Chicago, Ill.—The exact extent of the inaccuracies of the accounting system between the Chicago Railways Company and the city has been uncovered in the report of the auditors employed by the Mayor to go over the company's books. The report states that the gross errors caught by the examination of the records made by the Board of Supervising Engineers three months ago has been corrected, but in addition the accountants found incorrect entries and practices that showed the bookkeeping methods to be decidedly unsatisfactory. In addition to approving the subtraction from the joint account of \$119,000 for expenses of reorganization, it was recommended that a claim of \$42,411 against the receivers for legal expenses and \$93,076 for general expenses be stricken from the partnership ledger—making a total of \$254,000. The auditors went beyond the supervising board in disapproving of several other phases of the records—the alteration of which, according to their recommendations, would mean an increase of profits to the city by \$14,860 and the increase of the capital investment by \$46,337. This does not mean a final gain to the city, but it was understood with other findings of the report to indicate an unsatisfactory business management. A statement has been issued by the supervising board that the items amounting to \$254,000 have been shifted to the proper accounts, but the question of whether additional efforts to alter the records will be made is up to Mayor Busse and Special Traction Counsel Fisher. It is probable also that the Mayor will call the attention of the City Controller to insisting on an improved method of keeping the traction books.

### Trolley Trailers Ordered by P. R. T. After a Trial Trip

Philadelphia, Pa.—Trailer motor cars will be operated in Philadelphia as a way to relieve the great congestion of traffic during the morning and evening rush hours, this having been decided upon by the management of the Rapid Transit Company after an experimental train had proved satisfactory. About the reintroduction of trailer cars in Philadelphia, as now decided upon by the Rapid Transit Company, there is one prime feature of difference from those used elsewhere. The trailer cars here will have their own power and brakes, separate from the front car, and yet controlled by the one motorman. These shortly-to-be-inaugurated trailer trains will have two cars. The leading car will be one of the large double-truck type, 28 feet long and equipped with four 40-horsepower motors, one on each axle. The rear car will be one of the old single-truck type, which vary from 16 to 19 feet long, and each of which has one 25-horsepower motor. By the multiple-unit system all of these five motors, four on the front car and one on the hind car, are brought into simultaneous action and also simultaneous control by one motorman. When he applies or shuts off the electric current all the motors brought into circuit respond in like way. And this prevents jerking or bumping by the rear car. Also, both cars are equipped with airbrakes, which also, just as in the case of steam railroad and of other electric railway trains, will be applied by one hand—here that of the motorman. Thus there is no practical reason why the trailer cars should not be under perfect control of the one motorman. There will be a conductor for each car.

### Jersey City Joined by Tunnel to New York

Jersey City, N. J.—The new McAdoo tunnel, which joins Jersey City to Manhattan Island, was thrown open to the public July 19, following which there was a big celebration, with a parade and speech-making in this city. Miss Harriet Floyd McAdoo, daughter of the man who planned and constructed the tunnel system, touched the electric button which switched electric power into the third rails, and Mr. McAdoo himself started the first train, which carried invited guests from the Hudson Terminal Building, 50 Church street, near Cortlandt street, New York, to the Pennsylvania Railroad station in this city in just two minutes and forty seconds. The second train made the run in two minutes and fifty seconds, the third in three minutes, and the fourth in two minutes and fifty-five seconds. All bore invited guests, 2,000 of whom availed themselves of the opportunity to participate in the opening. Among these were Governor Fort, of New Jersey; Mayor H. Otto Wittpenn, of Jersey City; Attorney-General O'Malley, representing the Governor of New York; Acting Mayor Patrick F. McGowan, of New York City; Borough President John F. Ahearn, of New York, and other public officials, railroad men, financiers and newspaper men. Speeches were delivered by a number of them at the ceremonies at City Hall Park, during which Mr. McAdoo took occasion to praise enthusiastically those who had promoted the financial part of the undertaking, including Pliny Fisk, Wilbur Fisk and Walter G. Oakman, as well as the members of the engineering staff, including Chief Engineer Charles M. Jacobs, J. Vipond Davies, L. B. Stillwell, Hugh Hazleton and John Van Vleck. It is estimated that 100,000 persons used the tubes during the first twenty-four hours, the company running seven-car trains, carrying from 300 to 400 passengers on a two-and-a-half and three-minute headway. Sunday, July 25, the transverse tunnel was opened, and provided sufficient steel cars are received from the manufacturers it is hoped to institute a complete service on August 2. The new twin tunnels cost \$70,000,000.

### Jim Crow Patrons Oppose Smoking on Street Cars

Galveston, Tex.—John D. Kelley, City Secretary of Galveston, has addressed to the Board of Commissioners of Dallas and other Texas cities a request for information about the regulation of the smoking habit in the street cars. He says that while the State law makes it necessary for the street cars to provide separate seats for the negroes and white persons, it requires that the accommodations shall be equally good. He says that the street railway system of Galveston has prepared to have two seats near the rear of a car reserved for smokers. To this the negroes have entered a very general protest because of the fact that the last seat or two is reserved for the blacks and they object to the smoke.

### Protests Against New Transfer Law

Minneapolis, Minn.—Many protests are being made against the passage of the new transfer ordinance introduced in the Council by Alderman D. C. Bow. The principle of giving transfers to all passengers at the time the fare is paid is approved, but the wording of the ordinance seems to make it a restrictive instead of a beneficial measure, according to its opponents. This is the way it reads: "Every passenger who has paid proper fare is entitled to a transfer, which must be given immediately upon payment of fare upon a request from the conductor, whereupon it shall be the duty of the conductor immediately to issue such transfer, good at first point of intersection with the line the passenger desires to transfer to or at a loop designated by the company in the central portion of the city." This compels the passenger to ask for the transfer, and if he neglects to do so he is barred from the benefits of the transfer ordinance, the passage of which the company fought so strenuously fifteen years ago. Another feature criticised is the provision that only those who have paid a proper fare shall be entitled to the benefits of a transfer. This leaves the determination of what is a "proper fare" absolutely up to the company. The city has appealed to the Federal Supreme Court the six-for-a-quarter fare ordinance. If the city should win, and if the Bow ordinance should pass, its opponents declare those who refused to pay a five-cent fare could be deprived of a transfer.



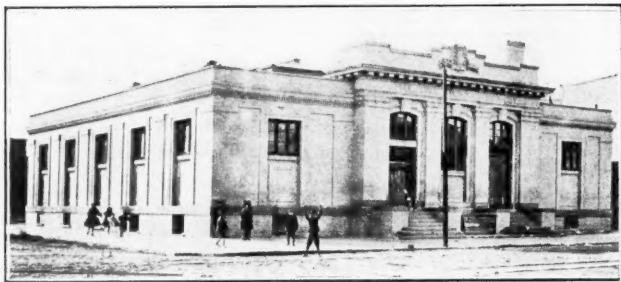
## MISCELLANEOUS

### Seawall Saves Galveston; Defies Storm Six Hours

Galveston, Tex.—The seawall saved the city from destructive damage by a tropical storm early last week, the massive concrete wall being put to the severest test. It stands 17 feet high, or a foot above the highest tide on that fatal day, September 8, 1900. The treacherous sea, backed by the wind, pounded for six hours against the wall, which broke the force of the water and sent the spray 50 feet in the air. Two large bath houses and pavilions outside the wall and two fishing piers extending out into the gulf were destroyed by the force of the waves, which the seawall resisted, and the debris was scattered on the seawall boulevard and drive inside the protection wall. No loss of life is reported, nor is there any report of homes being wrecked. For three hours Galveston was cut off from communication and the single track railroad bridge across Galveston Bay, connecting the island with the mainland, was cut off, a dredge boat being driven against the trestle, but repairs were made and traffic resumed within a day. Lewis Fisher, Mayor, and other prominent citizens, have issued an address to sister cities, in which it is stated that the "great seawall has completely vindicated its efficiency and protected the city against dangers from the sea, leaving such insignificant damages as are incident to all storms. The city, its great business interests and its people have safely passed through a most severe hurricane, the seawall provided a complete success, the city's great wharves and shipping interests suffered no damage and not a life was lost."

### Jersey City Opens New Bath House

Jersey City, N. J.—The new \$95,000 public bath house at Fourteenth and Erie streets was opened July 15 and dedicated to the cause of comfort. There are seventy-two shower bath compartments—thirty-six on the women's side of the building and an equal number on the men's side. It has only two bath tubs, one for invalid men and one for invalid women. The bathing compartments are separated by slate stone partitions and the swimming pool is so



Courtesy of the Jersey City Journal.

NEW BATH HOUSE IN SECOND WARD, JERSEY CITY, N. J.

equipped with intake and outflow apparatuses that the water is kept constantly clean and fresh. Mayor H. Otto Wittpenn accepted the new bath house on behalf of the city and at the dedication exercises were numerous public officials. A delegation of the Second Ward Improvement Association, including President James J. Waters, James F. Walton, Chauncey V. Bunnell and others attended, also Ex-Assemblyman Edward A. Murphy, Assemblyman Charles P. Olwell, Street and Water Commissioner John J. Heavey, Freeholder Peter A. Kane, Alderman Malachi A. Tarrant, John J. Sheehy, Frank Hague, Ex-Alderman William M. Barry, Ex-Freeholder Richard J. Fallahee, Boulevard Commissioner William J. Magner, Dr. Peter Hoffman and other well-known citizens of the ward.

### Off to Inspect Playgrounds

Philadelphia, Pa.—The members of the Mayor's Playgrounds Commission recently went to New York and Boston to inspect public playgrounds. Councils recently appropriated \$5,000 for the use of the Commission, which is to report on a system of playgrounds to be planned for this city, and for which there is \$100,000 in the new loan bill. The members on the trip are: Judge William H. Staake, president; Chairman J. R. C. McAllister, of Councils' Finance Committee; Chief A. S. Eisenhower, of the Bureau of City Property; Otto T. Mallory and John W. B. Carson.

### Shower Bath for Children in Streets

Kansas City, Mo.—A shower bath in the street is what E. T. Brigham, superintendent at the Helping Hand Institute, has arranged for the youngsters of Kansas City, the Fire and Water Board having given permission for such an innovation. Taking a rough drawing of his idea to a



plumber, Mr. Brigham had made a portable shower bath that can be attached to any fire hydrant. It consists of a two-inch pipe about five feet long with an attachment on the end resembling a water sprinkler. When attached to the hydrant the apparatus will extend above the curbing and will form a natural basin in which the children who are seeking a cooling outdoor bath will stand. The water falls on them from the sprinkler after the fashion of rain. "The Fire and Water Board has given me permission to connect my bath to fire hydrants," Mr. Brigham explained, "and when the first attachment is finished I will try it out on a North End street, where there is so little traffic that the dust will not interfere with the children's fun. These children are never bothered with too many clothes and it is my intention to have them get under the sprinkler, clothes and all. It may not be a bath in the strictest sense, but it will be cooling and that's what the children like these hot nights."

### Chicago Lays Cornerstone of \$5,000,000 City Hall

Chicago, Ill.—The cornerstone of Chicago's new \$5,000,000 City Hall was laid at noon, July 20, with appropriate ceremonies. Preceding the actual dropping of the stone into place there were speeches by Bernard J. Mullaney, Secretary to Mayor Busse; William Busse, President of the County Board; Frank I. Bennett, Chairman of the Council Finance Committee when the work was started; Alderman Charles M. Foell, who spoke for the present Chairman, Bernard W. Snow, and Edward J. Brundage, Corporation Counsel, who as President of the County Board built the Cook County Court House. Alderman Francis W. Taylor, Chairman of the Committee on City Hall and Public Buildings, placed the first mortar with a silver trowel, assisted by Paul Redieske, Deputy Commissioner of Public Works, and representatives of the Noel Construction Company, of Baltimore, Md., the contractors. This is the sixth City Hall dedicated by Chicago in a little over sixty years' time.

### Geese Tabooed in Birmingham

Birmingham, Ala.—City Council has passed an ordinance, reported by the Greater Birmingham Committee, making it unlawful to keep geese and other fowls within thirty feet of a residence.

### Prisoners Earn Money for City

Columbus, O.—It cost the city just 13.1 cents daily to feed and clothe each of the 257 prisoners confined in the workhouse during June, and at this price the prisoners only earned for the city 1.4 cents more than their cost of maintenance. The average daily earnings per capita for the month was 14.5. Of the 248 prisoners remaining in the place on June 1, 32 were women and 216 men, and only 150 were able to work on contracts because of the cramped quarters. The total earnings for June amounted to \$2,533.40, while the expenditures for the same time were \$2,413.62, leaving a net balance of \$119.78 for the month. The receipts, however, were not as large as the earnings, as the amount of cash taken in was only \$2,521.35. The balance due the city for keeping foreign prisoners is \$1,304.50, and bills from contractors amount to enough to make the cash balance due the city \$3,607.96.

### Curfew Reduced from Twenty to Five Bells

Elmira, N. Y.—The Fire Commissioners have ordered that during the repairing of the fire bell tower the clanging of the bell for the curfew be diminished to five taps of the bell, instead of some twenty or more taps that has been the custom in the past. This is done to relieve the strain on the supports in the belfry, which have become considerably weakened by the constant use of the bell.



## LEGAL NEWS

**A Summary and Notes of Recent Decisions—Rulings of Interest to Municipalities****Municipal Electric Plant—Injury to One of Public**

**Hodgins vs. Bay City.**—In an action against a city for causing the death of plaintiff's intestate by improperly insulating an electric light wire which it had strung on a telephone company's pole upon which plaintiff's intestate was at work for the telephone company when he was killed, the court charged that deceased was not called upon before beginning work to examine the wire to learn whether it was properly insulated, but might assume that defendant had properly constructed and maintained such wire, and that unless the jury found the danger was so plain that it should have been seen by him in the exercise of ordinary care, then he would not be charged with notice of the danger, and that the care which he was required to exercise was that which an ordinarily prudent man of 20 years' experience with electric wires would ordinarily exercise, and that, from his experience and knowledge of the dangerous character of the electric wires carrying high voltage of electricity, he was bound to use greater care than a person without such experience, and, if he failed to use such care he was guilty of contributory negligence, and that, when he went up the telephone pole it was his duty before going out upon the cross-arm and over the electric wires to have observed such conditions as were apparent to a man of ordinary caution under the conditions present, and if by looking he would have discovered that the insulation was cut, and that the place was dangerous, and he failed in such duty, he was guilty of contributory negligence. Held, that under the instructions the jury could not have been misled into believing that the question of due care on the part of deceased was wholly disregarded.—Supreme Court of Michigan, 121 N. W. R., 274.

**Water Company—Liability for Fire**

**Woodbury vs. Tampa Water Works Company.**—Where defendant water company contracted with a city to furnish water for fire protection, if because of defendant's negligent failure to furnish water where the fire started, and because of usual natural conditions, that were ordinarily likely to exist under the circumstances, and should reasonably have been contemplated as probable to occur, the fire, as a proximate result of the defendant's negligence, spread to and consumed plaintiff's property, defendant may be liable if it did not so discharge its immediate duty to plaintiff by furnishing water at or near plaintiff's house, that the water could reasonably, under the circumstances as they then existed, have been successfully used in extinguishing the fire when it reached plaintiff's property. If defendant was not negligent in failing to furnish water for the immediate protection of plaintiff's property, but as a proximate result of defendant's negligence in not furnishing water as legally required where the fire started, or at points covered by the conflagration before it reached plaintiff's property, the fire spread to and consumed such property, because it could not reasonably have been extinguished at plaintiff's house by the use of the water furnished there, defendant may be liable.—Supreme Court of Florida, 49 S. R., 556.

**Personal Injuries—Sufficiency of Notice**

**Hawley vs. Village of Saranac.**—Compiled Laws of 1897 provide that it shall be a sufficient defense to any claim against a village for personal injuries that it has never been presented, certified to, or verified to the Council for allowance, etc. Section 2,775 provides that no village shall be liable for personal injuries through defective streets, etc., unless within 60 days after the injury notice, setting forth substantially the time when and place where the injury took place, the manner in which it occurred, etc., is served on the Village Clerk, etc. Held, that where plaintiff, injured through a defective sidewalk, gave a notice fully apprising the Common Council of the time, place, and manner of the accident, and later and within 60 days served a claim on the Council making distinct reference to her notice, and itemizing, so far as possible, her damages under the claim, which was duly verified, as required by section 2,754, the statutes were sufficiently complied with.—Supreme Court of Michigan, 121 N. W. R., 303.

**Streets—Character of Improvement**

**Irish vs. City of Mount Clemens.**—Compiled Laws authorize the Council of fourth-class cities to pave streets. Section 3,181 authorizes the Council to determine the mode of defraying the expense of such paving. Section 3,195 requires the Council to make estimates and plats, and to give notice by publication, designating the time when objections will be considered, and provides that, unless a majority of those to be assessed petitioned therefor, no improvements shall be ordered, except by two-thirds vote of the Council. Section 3,194 requires the Council to declare by resolution the part of the improvement to be paid by special assessment, and what part from the general or street district funds, and designating the land upon which the assessment shall be levied. Public Acts of 1899, amending section 3,194, provides that if the owners of a majority of the lands liable to be assessed in any special assessment district shall petition for a public improvement, except sewers, the Council shall order such improvement to be made, but any other improvements shall be made in the Council's discretion. Held, that Act No. 136 merely gave the majority of the property owners the right to initiate improvements by requiring the City Council to act under the statutes, which authorized the Council to determine the character of the improvement made, and did not withdraw its discretion as to the nature of the improvements, so that, after the City Council had provided for paving streets in a certain manner, a majority of the property owners on a street could not require it to be paved in some other manner.—Supreme Court of Michigan, 121 N. W. R., 258.

**Accident—Notice**

**McCollum vs. City of South Omaha.**—A dangerous accumulation of snow and ice on a sidewalk was a defect therein within the meaning of Compiled Statutes of 1905, exempting South Omaha from liability for damages arising from a defective sidewalk, unless notice of the accident was filed with the City Clerk within 20 days. The charter of South Omaha as it existed in 1906 exempted the city from liability for damages arising from a defective sidewalk, unless notice of the accident was filed with the City Clerk within 20 days, and the fact that an injury deprived a person of consciousness during that time did not create an exception to the provisions of the statute, or excuse him for non-compliance with its terms.—Supreme Court of Nebraska, 121 N. W. R., 436.

**Defective Sidewalk—Negligence—Amount of Verdict**

**Scurlock vs. City of Boone.**—In an action for injuries to a woman walking with a boy on a sidewalk from being tripped by a sound plank in the walk which was displaced by the boy stepping on the end of it, where it appeared that she had no previous knowledge that the plank was loose or the sidewalk in a generally defective condition, and there was no evidence tending to show that her attention was diverted from the walk when injured, a requested charge that, if she had previous knowledge of the alleged defect, it was her duty to keep it in mind and look for it, unless there was something sufficient to divert her attention, and, if she failed to do so, she was negligent and there could be no recovery, etc., was properly refused as not supported by the evidence. Where a woman injured by a defective sidewalk was confined to her bed for some time, necessitating medical attendance and nursing from the members of her immediate family and near relatives, and her condition at the time of trial was such that medical attention would probably be required in the future, a verdict for \$650 was not excessive.—Supreme Court of Iowa, 121 N. W. R., 370.

**Invalid Contract for Use of Paving Plant—Compensation**

**Nebraska Bithulithic Company vs. City of Omaha.**—A municipal corporation by contract obtained the use of an asphalt plant for the purpose of repairing its paved streets. In making the contract the provisions of the city charter were not complied with, and the contract was therefore void. Held, notwithstanding that fact, that the city was liable for the value of the reasonable use of the plant while making such repairs. Evidence examined and found sufficient to sustain the judgment of the District Court.—Supreme Court of Nebraska, 121 N. W. R., 443.

## NEWS OF THE SOCIETIES

### League of Wisconsin Municipalities.

—The annual convention met at Marinette, Wis., on the afternoon of July 21. In the address of the president, H. W. Bolens, education in politics was recommended as a means of curing many municipal ills. He called attention to the fact that every bill before the last Legislature endorsed by the League was passed, while all opposed by it were defeated, thus demonstrating the influence of the League. The League now issues an official organ, which has recently been changed from a monthly to a bi-monthly, and this change was reported by Secretary W. G. Kirchoffer to have been advantageous. W. O. Hotchkiss, of the State Highway Bureau, made a strong argument for State aid for country roads. In the evening Mr. John Nolen, landscape architect, of Cambridge, Mass., expressed his opinion that it is desirable for civic societies to rely more upon the official machinery of their respective cities to carry on the work of municipal improvement, and not endeavor to work independently of the officials, although such voluntary organizations could do much in the way of investigating conditions and suggesting remedies. This would be more likely to procure actual results and would be more certain to obtain the general approval of the citizens. "City Making in Wisconsin" was the subject of Mr. Nolen's paper, and in addition to the above he recommended that every town have a city plan commission and also park and tree commissions. Other papers presented were: "Change of Date for Paying Taxes from January to July," by Alderman J. S. Dooley, Racine; "Artificial Ground Water Supply of Marshfield," by W. G. Kirchoffer; "Iron Removal from Ground Water," by W. C. Lounsbury, Superior, Wis.; "The Cooperation Desired from Cities by the State Fire Marshal's Department," by T. M. Prestell, State Fire Marshal, Madison; "The Work of the Legislature Upon the Laws Relating to Cities," by E. W. Le Roy, Marinette, and C. E. Estabrook, Milwaukee; "Importance of the Merit System in the Evolution of Modern City Government," by Glenway Maxon, Milwaukee; "Has the Public Utility Law Been a Benefit to the Municipalities of the State," by A. L. Hougen, Manitowoc; "Explanation of a Proposed Municipal Reference Library" and "City Government by Commission," by Ford H. McGregor; "Principles and Progress of Home Rule," by H. C. Campbell, Milwaukee; "Let Wisconsin Cities Govern Themselves," by Burt Williams, former Mayor of Ashland; "Why Milwaukee Needs Home Rule," by General F. C. Winkler, Milwaukee. Fond du Lac was chosen as the meeting place for 1910.

The following officers were elected: President, Mayor J. C. Schubert, Madison; vice-president, Mayor A. J. Horlick, Racine; secretary, W. G. Kirchoffer, Madison; vice-presidents from the various Congressional districts in the order named: Mayor Knight, Monroe; Mayor M. J. Downey, Portage; Mayor C. B. Perry, Wauwatosa; Henry Smith, Milwaukee; Mayor C. W. Starrte, Plymouth; J. H. Flemming, Eau Claire; Mayor John C. Voss, Oshkosh; Martin Brett, Algoma; Frank Pomainville, Grand Rapids, and Mayor F. R. Crumpton, Superior. Executive committee: A. S. Douglass, Monroe; H. W. Bolens, Port Washington; W. C. Truesdell,

Berlin; M. P. Carrington, Waupun, and H. R. Goldman, Marinette.

The convention went on record as unanimously in favor of home rule for Badger cities. Following the paper on that topic by General Winkler, of Milwaukee, the following resolution was adopted without a dissenting vote:

Resolved, That self-government belongs by right to every American community and that sound public policy calls for the establishment of home rule in the cities of Wisconsin. To this end, we authorize the officers of the league to take any and all steps which, in their judgment, may be necessary to bring this about.

**New England Association of Chiefs of Police.**—The sixth annual convention was held July 23 at the headquarters of the Worcester Department, Worcester, Mass., where the session was given up to a discussion of criminals and subjects relating to their work. It was voted to have the 1910 convention in conjunction with that of the Massachusetts Association of Police Chiefs at Nantasket. Officers for next year were elected as follows: Stephen C. Wheeler, of Winsted, Conn., president; J. C. Bowen, of Bangor, Me., first vice-president; A. H. Noyes, of St. Johnsbury, Vt., second vice-president; James H. Crowley, of Newport, R. I., third vice-president; Thomas Entwistle, of Portsmouth, N. H., fourth vice-president; Frederick M. Mitchell, of Newton, secretary and treasurer.

**Iowa Association of Police Chiefs.**—This association was organized at Des Moines on July 15 by Police Chiefs representing twenty-two cities and towns of the State. Chief of Police Miller of Des Moines was elected president, secretary and treasurer; Chief Henry Olsen of Fort Dodge was elected first vice-president, and W. J. Van Natta, of Muscatine, second vice-president. The association was addressed by Police Chiefs Carl of Cedar Rapids and George H. Richmond of Council Bluffs on "Improvement in the Work of Direction and the Apprehension of Criminals." Chief Dineen described the national convention of Police Chiefs in Buffalo, which he recently attended.

**Protective Veteran Police Union.**—An association of this name has been incorporated in Baltimore, Md., the objects of the association being stated to be "for historical, social, literary and beneficial purposes."

**Montana's Mayors' Association.**—Efforts are being made in Montana to organize an association of the Mayors of that State. The movement has just been started, and already several Mayors have expressed themselves in favor of it, and Mayor A. G. Berthot, of Bozeman, is taking an active interest in its formation.

**Confederated Civic Improvement and Protective Association of Baltimore County.**—At the meeting of this association in Baltimore on July 19, James Blaine Walker, assistant secretary of the Public Service Commission of the New York State First District, described the working of this Commission. After the address Mayor J. Barry Mahool of Baltimore expressed as his belief that before long his city would need a Commission of this kind.

**Ohio Electric Light Association.**—The fifteenth annual convention was held at the Boody House in Toledo, O., July 14 and 15. A symposium on "The Commercial Organization of Electric Lighting Companies and Their Relation to the Public" was given by D. W. Low, Alliance; C. C. Custer, Piqua, and W. E. Richards, Toledo. This was followed by a paper on "Boiler Room

Economies," by N. B. Ayres, of Dayton. These were followed by a thorough discussion by the members. Secretary Gaskill's salary was raised from \$600 to \$780. He was also reimbursed \$150 for extra work performed in getting up the souvenir programme.

**Lake Shore Volunteer Firemen's Association.**—The sixth annual convention was held at Hilton, N. Y., July 14. President Edson Taber delivered his annual address, and Treasurer A. De Hond, of Williamson, reported on the finances, which are in a flourishing condition. Three new companies were admitted to membership, the Ontario Mutual Fire Company, the Baldwin Engine Company and the Charlotte Hook and Ladder Company. Dr. Seymour, of Walcott, was elected president, and Treasurer A. De Hond and Secretary E. G. Rogers were re-elected. It was decided to hold the next meeting at Walcott. On the following day an exhibition was given, followed by competitive drills, athletic events, etc.

**Colorado Electric Light, Power and Railway Association.**—The annual meeting will be held at Denver, Col., October 7-9, in conjunction with the convention of the American Street and Interurban Railway Association. Papers will be read on "The Commercial Field," "Meters and Testing" and on "Lamps and Illumination." The secretary is Mr. J. C. Lawler, P. O. Box 938, Colorado Springs, Col.

## Calendar of Meetings

### August 3-4.

**Vermont State Firemen's Association.**—Convention and Tournament.—E. D. Moore, Secretary, Bennington, Vt.

### August 9-11.

**International Acetylene Association.**—Twelfth Annual Meeting, Hotel Knickerbocker, New York, N. Y.

### August 10.

**Connecticut State Fire Chiefs' Association.**—Annual Meeting, New London, Conn.—R. R. Fancher, Secretary, New Haven, Conn.

### August 10-11.

**Connecticut State Firemen's Association.**—Convention, New London, Conn.—R. V. Magee, Secretary, Watertown, Conn.

### August 11-13.

**National Firemen's Association.**—Convention, Lansing, Mich.—P. B. McCarty, Secretary, P. O. Box 600, St. Louis, Mo.

### August 17-20.

**New York State Firemen's Association.**—Convention and Parade, Poughkeepsie, N. Y.—Thomas Holohan, Secretary, Frankfort, N. Y.

### August 17-20.

**International Association of Fire Engineers.**—Annual Convention, Grand Rapids, Mich.—James McFall, Secretary, Ruanoke, Va.

### August 25-27.

**League of American Municipalities.**—Thirteenth Annual Convention, Montreal, P. Q., Canada.—John MacVicar, Secretary, Des Moines, Ia.

### August 25-27.

**Virginia State Firemen's Association.**—Convention and Tournament.—G. C. Cumming, Secretary, Portsmouth, Va.

### September 7-10.

**Pacific Coast Association of Fire Chiefs.**—Convention, Seattle, Wash.—W. H. Bringham, Secretary, Seattle, Wash.

### September 8-10.

**New England Water Works Association.**—Annual convention, New York City.—Willard Kent, Secretary, Narragansett Pier, R. I.

### September 9.

**New Jersey State Firemen's Association.**—Convention, Atlantic City, N. J.—William Exall, Secretary, 86 Bruce street, Newark, N. J.

### September 15-17.

**Massachusetts State Firemen's Association.**—Convention, Plymouth, Mass.—D. Arthur Burt, Secretary, Taunton, Mass.

### September 29.

**New Hampshire State Firemen's Association.**—Convention, Woodsville, N. H.—George L. Osgood, Secretary, Concord, N. H.

### September 29-30.

**Ohio Fire Chiefs' Association.**—Convention, Alliance, O.—D. K. Mosher, Secretary, Warren, O.



## PERSONALS

A. F. BANNON, Jr., City Engineer of Bradford, Pa., has resigned and has been appointed Superintendent of the Board of Public Works of Hornell, N. Y., succeeding Frederick Leach, deceased.

BUCK, LEFFERT LEFFERTS, New York City, one of the best known civil engineers in the country, who was associated with Roebling in building the Brooklyn bridge, was Chief Engineer of the Williamsburg bridge across the East river, designed two steel arches over the Niagara river from America to Canada, and had directed other engineering works of note both in North and South America, died at his home recently at the age of 72 years.

BURNETT, W. R., Mayor of Springfield, O., has resigned to become Commandant of the Ohio Soldiers and Sailors Home at Sandusky; David S. Snyder, President of the Council, succeeds to the position and Albert Eglinger, President pro tem of Council, is elevated to President of Council and Vice Mayor.

CRAWFORD, JAMES, Fostoria, O., has been named as member of the Board of Health by Mayor Gebert and confirmed by Council; Dr. T. W. Clark was named by Mayor Anderson, who also claims to be the city's chief executive, but no action was taken by Council, the ruling being that the position had been filled.

CUSHMAN, ALLERTON S., Assistant Director of Public Roads, U. S. Department of Agriculture, has returned to this country from London and Paris, where he investigated the building of public roads, and speaks approvingly of the method of sprinkling roads with tar.

DITTOE, W. H., Columbus, O., Assistant Engineer and Inspector of the State Board of Public Works, is making an inspection of the public dumping grounds in a number of Ohio cities.

HOUSTON, JOHN J. L., has been appointed Assistant Engineer, Department of Parks, Boroughs of Brooklyn and Queens, New York City, with headquarters at Prospect Park in Brooklyn; previous to this appointment Mr. Houston was a topographical draftsman in the park department.

JOHNSTON, ROBERT, member of the Board of Control of Norfolk, Va., since its installation three years ago, has announced his resignation on account of ill health.

MADDEN, WALTER, Mayor of Trenton, N. J., has appointed as members of a River and Harbor Commission recently created by the Common Council Henry C. Moore, Robert K. Bowman, Frederick W. Donnelly and Richard Stockton.

MAGEE, WM. A., Mayor of Pittsburg, Pa., with Joseph G. Armstrong, Director of the Department of Public Works and Dr. E. R. Walters, Director of the Department of Health and the Department of Charities, is making a tour of the large cities of the country to investigate public improvements, particularly the subject of playgrounds and parks.

MOREY, DAVID, chemist of the filtration plant at Harrisburg, Pa., has been appointed as Superintendent of the filtration plant of Louisville, Ky., and has already taken up the work.

NEWTON, JOHN, Bloomfield, N. J., has been appointed as a member of a newly-created Shade Tree Commission for a term of five years, Charles A. Hungerford for a four-year term and Walter Eller for three years.

NICHOLS, GRIF, has been elected Borough Engineer of Sharon, Pa.

POTTS, CLYDE, New York, N. Y., has been selected by the City Council of Beverly, N. J., to prepare preliminary plans

for a sewerage system, there being several other applicants for the position.

SHERMAN, Gen. M. H., member of the Board of Water Commissioners and one of the wealthiest citizens of Los Angeles, Cal., has been asked for his resignation by Mayor Alexander, following a decision by City Attorney Hewitt that Gen. Sherman was violating the city charter in holding a city office at the same time that he is a stockholder in an office building rented to the city Water Department; General Sherman refuses to resign and says he will resist any attempt to remove him from office.

SIFFERLIN, JOSEPH C., Dayton, O., has been elected Councilman-at-large, succeeding E. L. McConaughy, recently appointed Collector of the Local Port of Entries; Charles A. Phillips was named to succeed Councilman John Cissna, who removed to the Soldiers Home to accept an appointment, and Gus Hodabb was chosen as the successor of Thomas P. Kearns of the Eighth Ward, who has been made State Inspector of Workshops and Factories.

STORY, E. O., Anderson, Cal., Carl Munter and S. G. Roycroft have been appointed as a Board of Fire Commissioners by the Board of Supervisors and will serve until next April, when an election will be held.

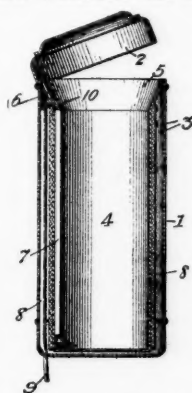
SUTTON, GEORGE H., Mayor of Austin, Minn., since 1906, died of pneumonia at Omaha recently and was buried in his home city; he was born at Devon, England, 42 years ago.

ZORN, SEBASTIAN, President of the Board of Water Works at Louisville, Ky., and the other officers and engineers are to be tendered a banquet commemorating the completion and operation of the filter plant, the prime mover in the affair being Charles P. Weaver, who was Mayor of the city eleven years ago when Chief Engineer Charles F. Hermany of the Louisville Water Company undertook the work.

## PATENT CLAIMS

926,961. **DISINFECTANT APPARATUS.** Frederick D. Raforth, Dubuque, Iowa, assignor to Lorenzo O. Hillyard, Dubuque, Iowa. Serial No. 478,050.

In a disinfecting device, the combination of an outer casing perforated in its upper portion, an inner impermeable liquid containing vessel centrally spaced within the outer casing to provide an annular space within the latter, a tubular absorbent mantle enveloping the inner vessel, a drip tube in the outer casing, a wick retaining tube in the inner vessel, and a wick passing through said wick tube and into said drip tube with the portion between said tubes in engagement with said mantle, which transmits the liquid from said ves-

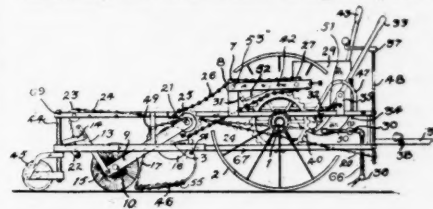


sel to the mantle at the upper portion of the latter and from which the liquid drips out of the casing.

926,723. **STREET-CLEANING MACHINE.** James E. Briggs, Waterloo, Iowa. Serial No. 413,283.

In a street-cleaning machine, in combina-

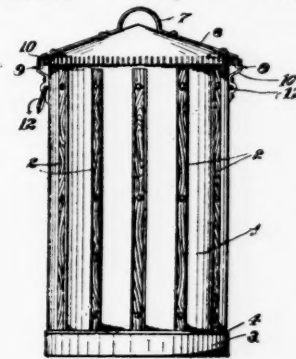
tion, a frame mounted on transporting means, a horizontal vertically-adjustable rearwardly-rotatable broom adapted to sweep to approximately the outer line of the tread of said transporting-wheels, and a rearwardly opening closed front trough mounted anterior to said broom and adapted to receive the sweepings therefrom and deliver them at one side of the machine, the said broom being adapted to



sweep to approximately the outer line of the tread of said machine on the same side, said trough being composed of a plurality of relatively movable sections, means for swinging said sections vertically, and means within said receptacle for engaging the sweepings therein when desired and carrying them out at one end thereof, and being adapted to be raised a distance above the street, by swinging it upwardly, before discharging its contents to prevent clogging of its discharge opening.

926,864. **GARBAGE-CAN.** Isadore Gluckman, Minneapolis, Minn. Serial No. 467,292.

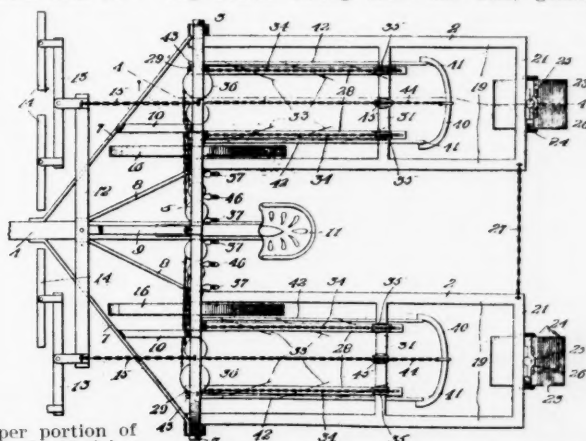
The combination with a can having lock brackets at diametrically opposite points, said brackets having lock notches in both edges, of a can cover, and a rigid metal strap secured to the top of said cover and



provided with downwardly and outwardly extended ends, which ends afford lock lugs that are engageable with the lock notches of said brackets, the intermediate portion of said strap being bowed upward to afford a handle.

927,239. **ROAD-REPAIRING MACHINE.** Windsor G. Herring, Comanche, Tex. Serial No. 453,046.

A machine of the character described comprising a main frame having an axle, an arch fixed thereto, a tongue fixed to said axle, and braces between said tongue, arch and axle, supporting wheels upon the axle, vertically swinging side frames hung at their forward ends upon the axle, packing wheels or rollers for supporting the rear ends of said side frames, disks carrying beams swung from the axle, guides



upon the side frames for said beams, means for raising and lowering said beams, drags swung from said axle and arranged between the disks on said beams and said rollers, and means for raising and lowering said drags.



## THE WEEK'S CONTRACT NEWS

Relating to Municipal and Public Work—Street Improvements—Paving, Road Making, Cleaning and Sprinkling—Sewerage, Water Supply and Public Lighting—Fire Equipment and Supplies—Bridges and Street Railways—Sanitation, Garbage and Waste Disposal—Police, Parks and Miscellaneous—Proposals and Awards

To be of value this matter must be printed in the number immediately following its receipt, which makes it impossible for us to verify it all. Our sources of information are believed to be reliable, but we can not guarantee the correctness of all items. Parties in charge of proposed work are requested to send us information concerning it as early as possible; also corrections of any errors discovered.

## BIDS ASKED FOR

STATE	CITY	RECEIVED UNTIL	NATURE OF WORK	ADDRESS INQUIRIES TO
STREET IMPROVEMENTS				
Tennessee	Memphis	July 29	Sheet asphalt paving, 40,900 sq. yds.; brick or asphalt on concrete, 15,400 sq. yds.; brick, 11,000 sq. yds., grading, etc.	James H. Malone, Mayor.
West Virginia	Wheeling	July 29, noon	Furn. and laying brick or block, bithulithic, asphalt, wood or asphalt block, etc.; stone and concrete curbing, sewers, etc.	D. T. Brown, Clk. Bd. of Control.
Indiana	Fort Wayne	July 29, 7:30 p.m.	Paving one alley and grading another.	Edw. J. Lennon, Chm. Bd. Pub. Wks.
New York	Brooklyn	July 29, 3 p.m.	Resurfacing old walks in and around Prospect Park Plaza.	Henry Smith, Pres. Park Board.
Pennsylvania	Williamsport	July 29, noon	Furnishing small asphalt repair plant.	O. H. Young, Chm. Hwy. & Sew. Com.
New York	New York	July 29, 3 p.m.	Furn. and del. 800 bbls. emulsifying road oil, No. 1, 1909.	Henry Smith, Pres. Park Board.
Ohio	Columbus	July 29, noon	Grading, macadamizing and brick paving, 1.88 miles road Smith twp., \$21,672; grade and macadamize, 1.18 miles, Berlin twp., \$8,741.	James C. Wonders, State Hwy. Comr.
Ohio	Cincinnati	July 30	Treating with oil Cleves and Warsaw pike, Green and Delhi twps.	Fred Dreihls, Clk. County Comrs.
Iowa	Des Moines	July 30	Sheet asphalt paving, 7,189 sq. yds., cement curb, 2,446 ft.	Geo. F. Poorman, City Clerk.
Pennsylvania	Warren	July 31, noon	Regulating, grading, paving and curbing Fourth st., 45 ft. wide from Market to Hickory st.	George Ott, Chm. Street Com.
Ohio	Youngstown	July 31, 1:30 p.m.	Grading and macadamizing 3,860 ft. town line road, Dist. 1.	Edwin D. Haseltine, Engr., 1818 Wilson Ave.
Tennessee	Newport	July 31, 2 p.m.	Grading and macadamizing 70 miles of road and bldg. bridge.	B. W. Hooper, Secy. Co. Pike Comrs.
Alabama	Eutaw	July 31	Laying cement sidewalks, curb and gutters on Prairie st.	John W. Cook, Mayor.
Ohio	Canton	July 31, noon	Bldg. 5 miles of stone pike on Krout road.	J. W. Montgomery, Chm. Co. Comrs.
New York	Philmont	July 31, noon	Constructing 825 ft. concrete walk on Church st.	E. S. Simmons, Village Trustee.
Ohio	Findlay	July 31, noon	Bldg. 5 miles stone pike on Krout road, Delaware twp.	J. W. Montgomery, Chm. Co. Comrs.
Texas	Galveston	July 31, noon	Brick paving, concrete curbing and sidewalks, Ft. Crockett.	Capt. John C. Oakes, U. S. Engr.
New Jersey	Morristown	Aug. 2, 2 p.m.	Macadamizing 3 roads for county; 2.6; 3.99 and 2.94 miles long.	Gustave A. Becker, Dir. Freeholders.
Indiana	Danville	Aug. 2, 10 a.m.	Bldg. 6,792 ft. gravel road on White road, Canton twp.	Wm. H. Nichols, County Auditor.
North Carolina	Goldsboro	Aug. 2, noon	Concrete sidewalks, 60,000 sq. yds., \$150,000 bond issue.	D. J. Broadhurst, City Clerk.
Idaho	Boise City	Aug. 2, noon	Constructing concrete pavement, etc.; in Paving Dist. No. 12, per Ordinance No. 841; check, \$1,000; bond, \$10,000.	D. D. Williams, Pres. Bd. Pub. Wks.
California	Los Angeles	Aug. 2	Installing machinery at quarries and furnishing rock for roads.	C. G. Keyes, Clk. Co. Bd. Supervisors.
Virginia	Norfolk	Aug. 2, noon	Regulating and paving 12 sts. with smooth material.	W. T. Brooke, City Engineer.
Indiana	Vernon	Aug. 2	Constructing 2 miles of pike road in Geneva twp.	T. L. Thomas, County Auditor.
Ohio	Toledo	Aug. 2, 10 a.m.	Grading, macadamizing, etc., 3 miles road; repair stone road.	D. T. Davies, Jr., County Auditor.
Oklahoma	Claremore	Aug. 2	Construct. 10 blocks asphalt pavement; cost, \$65,000 to \$70,000.	O. T. Coffey, City Engineer.
Indiana	Franklin	Aug. 2, noon	Constructing 2 gravel roads.	W. B. Jennings, County Auditor.
Indiana	Greencastle	Aug. 2, 11 a.m.	Bldg. 2 macadam roads, 8,718 ft. Jackson, 7,209 ft. 3 other twps.	D. V. Moffett, County Auditor.
Indiana	Lawrenceburg	Aug. 2, noon	Improvement of highway in Kelso township.	Wm. S. Fagay, County Auditor.
New York	Hornell	Aug. 2, 3 p.m.	Vit. brick or block on concrete, 4,942 sq. yds.; curbing, 3,114 lin. ft.; excav., 1,578 cu. yds., on Genesee st.	M. E. Chesebro, Act. Supt. Pub. Wks.
Indiana	Tipton	Aug. 2, 10 a.m.	Constructing 4 gravel and 3 stone roads.	J. F. Barlow, Co. Auditor.
Virginia	Hampton	Aug. 2	Brick, block, asphalt or granite paving, 29,800 sq. yds.; granite curb, 9,500 ft., concrete curb and gutter, 49,900 ft., etc.	Street Commissioner or Council.
Indiana	Kentland	Aug. 2	Constructing 7 roads in Newton County.	E. R. Bringham, County Auditor.
Wabash	South Bend	Aug. 2	Furn. jaw crusher with 30 ft. elevator and 2 section screen, portable boiler and engine, road roller, sprinkler.	John R. Goulter, Chm. Co. Comrs.
Minnesota	Minneapolis	Aug. 2	Graveling roads Nos. 23 and 83 and rebldg. 4 bridges.	Hugh R. Scott, County Auditor.
Minnesota	Faribault	Aug. 2	Furn. 10-ton steam or gasoline road roller and No. 2 or 3 rock crusher.	D. F. MacKenzie, City Recorder.
Missouri	St. Louis	Aug. 3	Brick, bithulithic and asphalt paving, numerous streets.	Max Reber, Pres. Bd. Pub. Impvts.
Indiana	South Bend	Aug. 3, 10 a.m.	Laying variated macadam pavement on Notre Dame st.	A. T. Hammond, City Engineer.
New Jersey	West New York	Aug. 3, 8 p.m.	Improving Bull's ferry road from 16th to 18th streets.	J. L. Wolfe, Town Clerk.
New Jersey	Bayonne	Aug. 3	Brick, asphalt or Blome granite paving.	F. W. Dalrymple, City Engineer.
Indiana	Rockville	Aug. 3, 1:30 p.m.	Bldg. gravel road, inc. bridge draining, etc., road, Adams twp.	H. A. Henderson, County Auditor.
Ohio	Cottsville	Aug. 3, 2 p.m.	Grading and macadamizing Robinson road.	J. S. Palmer, Clk., Township Trus.
Indiana	Crawfordsville	Aug. 3	Constructing a highway in Ripley township.	Bennett B. Engle, County Auditor.
Indiana	Kentland	Aug. 3, 1 p.m.	Constructing 6 macadam roads in Grant township.	E. R. Bringham, County Auditor.
Indiana	Paoli	Aug. 3, 2 p.m.	Bldg. 2,685 ft. gravel on Chambersburg road.	Alvin B. Ham, County Auditor.
Indiana	Versailles	Aug. 3, noon	Bldg. 20,625 ft. macadam road, Adams twp.	Nicholas Volz, County Auditor.
Indiana	Fowler	Aug. 3, 1 p.m.	Bldg. 4 county roads; cost \$47,675; bridges, etc., \$10,900.	Lemuel Shipman, County Auditor.
Indiana	Portland	Aug. 3, 1 p.m.	Grading, draining, limestone paving, 35,775 lin. ft. road.	W. Lea Smith, Auditor Jay County.
New Jersey	Atlantic City	Aug. 4, 11 a.m.	Grading and macadamizing shore road at Absecon to N. J. ave., Somers Point.	E. D. Rightmire, County Engineer.
New York	Brooklyn	Aug. 4, 11 a.m.	Re-paving asphalt, laying cement walks, crosswalks, etc.	Bird S. Coler, Borough President.
Pennsylvania	Harrisburg	Aug. 6	Rebldg. 5,030 lin. ft., Richland twp., Cambria County.	Ios. W. Hunter, State Hwy. Com.
New York	Albany	Aug. 6, 1 p.m.	Repair or resurface 4 state roads, in Chenango County.	S. Percy Hooker, Chm. State Hwy. C.
Ohio	Cincinnati	Aug. 6	Oiling Colerain Pike, Colerain twp., Spec. No. 917.	Fred. Dreihls, Clk. County Comrs.
Pennsylvania	Lansdowne	Aug. 6, 8:30 p.m.	Paving 21,000 sq. yds. Balto. ave., bitu., repressed vit. shale or fire clay blocks, on concrete; 7,500 cu. yds. excav.	John W. Davis, Sec'y Boro. Council.
New York	Albany	Aug. 6, 1 p.m.	Resurfacing or repair of 5 state roads Ontario Co., cost \$750,000.	S. Percy Hooker, Chm. State Hwy. Com.
Ohio	Euclid	Aug. 9, noon	Improving Chardon road, 5,626 ft. long; F. A. Pease Eng. Co.	Nelson J. Brown, Village Clerk.
Montana	Great Falls	Aug. 9, 8 p.m.	Creo. wood block paving First ave., South; 13,000 sq. yds., 2,040 cu. yds. concrete; 2,350 cu. yds. earth excav., 642 lin. ft. headers, \$3,000 check; C. W. Swearingen, City Engr.	W. P. Wren, City Clerk.
Mississippi	West Point	Aug. 9, 6 p.m.	Laying cement gutters and graveling sts. in fire limits.	B. Y. Rhodes, Mayor.
New Jersey	Camden	Aug. 11, 11 a.m.	Bldg. stone road 14 ft. wide, 1,629 miles long of either Amesite or asphalt macadam; also 14 ft. road, 1,237 miles long; J. J. Albertson, Co. Engr.	Alfred L. Sayers, Dir. Bd. Freeh'd's
Ohio	Millersburg	Aug. 12	Brick paving 5,000 sq. yds., stone or concrete curb; \$8,640.	Saml. Franks, Jr., Village Clerk.
Ohio	Cincinnati	Aug. 13, noon	Improving Ohio pike, \$5,000 bond; resurfacing pike, \$1,000 bond.	Fred. Dreihls, Clk. County Comrs.
Pennsylvania	Philadelphia	Aug. 14, 11a. m.	Street paving, curbing, rr. track and drains, at Navy Yard.	Bur. Yds. & Docks, Navy Dept., Wash. D. C.
Ohio	Columbus	Aug. 14	Macadamizing, etc., Pontius road, 4.3 miles long.	Walter Braun, Clk. County Comrs.
Minnesota	St. Paul	Aug. 16	Improving Ham line ave. and Sjoestedt road.	Edward G. Krahmer, County Auditor.
Ohio	Euclid	Aug. 16	Improving Euclid road; F. A. Pease Eng. Co., Cleveland.	Nelson Brewer, Village Clerk.
Ohio	Cleveland	Aug. 18, 11 a.m.	Grading, draining and improving Miles ave., No. 3 road.	A. B. Lea, County Surveyor.
Virginia	Staunton	Aug. 23	Constructing 4½ miles of macadam road, Augusta Co.	Harry Burnett, Clk. Bd. Supervisors.
Indiana	Rushville	Aug. 30	Constructing 3 miles of macadamized roads.	Stewart & Kennedy, Engrs.
SEWERAGE				
Michigan	Owosso	July 29, 7:30 p.m.	Bldg. 3,200 ft. 24-in., 925 ft. 20-in., 900 ft. 8-in. vit. pipe sewer	A. H. Dumond, Secy. Bd. Pub. Wks.
Ohio	Cincinnati	July 29, noon	Bldg. sewer and drains, Linwood ave., et. al.; \$2,000 bonds; also sewers and drains in Witte alley; \$1,000 bond.	John J. Wenner, Clk. Bd. Pub. Serv.
West Virginia	Wheeling	July 29	Furn., also for hauling and laying sewer pipe in streets.	D. T. Brown, Clk. Bd. of Control.
Indiana	Muncie	July 29	Bldg. sewers in Blaine and Liberty sts.; old bids: \$1,115 and \$657.	J. O. Potter, City Engineer.
South Dakota	Mitchell	July 29	Constructing sewers for city, John L. Nelson, City Engr.	L. L. Ness, City Auditor.

## BIDS ASKED FOR

STATE	CITY	RECEIVED UNTIL	NATURE OF WORK	ADDRESS INQUIRIES TO
SEWERAGE—Continued				
Ohio	Lebanon	July 30, noon	Bldg. 2,225 ft. 8 and 10-inch. vit. tile sanitary sewers.	M. E. Guston, Village Clerk.
New Jersey	Rutherford	July 30	Constructing sewers in Carmita ave., Ayer and Ivy place.	F. A. Stedman, Borough Clerk.
New York	Troy	July 30	Bldg. vit. drain pipe in Spring ave., Fifth Ward.	Jas. M. Riley, Secy. Bd. Con. & Supply.
North Dakota	Dickinson	Aug. 2	Constructing 10 blocks sewer pipe.	A. J. Osborn, City Auditor.
Wisconsin	Hudson	Aug. 2, 8 p.m.	Bldg. 8-in. pipe sewer in Division street.	E. E. Denniston, City Clerk.
Iowa	Iowa Falls	Aug. 2	Bldg. 6½ blocks 8-in. sanitary sewer and laying 2 water mains.	F. E. Foster, City Clerk.
Kansas	Kingman	Aug. 2, 5 p.m.	Constructing sewers in Dist. No. 1, inc. 22,070 ft. 6-in.; 2,316 ft., 8-in.; 1,019 ft. 10-in.; 1,675 ft. 12-in. and 1,442 ft. 15-in. pipe; 100 manholes, 32 flush tanks.	B. A. Welch, City Clerk.
Louisiana	Ft. St. Philip	Aug. 2, noon	Constructing sewer and water systems.	Louis F. Garrard, Jr., Constr. C. M.
Minnesota	Canby	Aug. 2, 8 p.m.	Constructing sewers; \$20,000 bonds voted.	O. N. Rund, City Recorder.
Mississippi	Grenada	Aug. 2, noon	Constructing sewer extension.	John P. Jones, City Clerk.
Arkansas	Monticello	Aug. 3, 10 a.m.	Seven miles of 8 to 12-in. sewers pipe with 2 purif. plants.	Walter G. Kirkpatrick, C.E., Jackson, Miss.
Oklahoma	Chandler	Aug. 3	Constructing sewer system; \$25,000 bonds available.	J. A. McLoughlin, Mayor
Kentucky	Hopkinsville	Aug. 3	Bldg. septic tank at Western Ky. Asylum for Insane.	Albert Scott, Pres. Ky. Asylum
New Jersey	Rahway	Aug. 3, 8 p.m.	Bldg. 4,300 ft. 10-30-in. vit. tile pipe sewers with laterals, etc.	Franklin Marsh, City Engineer.
South Carolina	Florence	Aug. 4	Plans, etc. for complete sewer system and to supervise building.	H. K. Gilbert, Chm. Sewer Comm.
Virginia	Portsmouth	Aug. 5	Furn. and distributing on sts. 836 ft. 24 to 36-in. pipe.	Bascom Sykes, City Engineer.
Kentucky	Louisville	Aug. 6, noon	Bldg. Sec. B, western interceptor; Cont. 49; mainly 4,000 ft. 3.5 to 5 ft. unreinforced concrete sewer, 12-25 ft. deep.	W. C. Nones, Chm. Sewer Com.
Indiana	Evansville	Aug. 7, 10 a.m.	Bldg. 3 vit. sewer laterals.	W. F. Wunderlich, Clk. Bd. Pub. Wks.
New Jersey	Atlantic City	Aug. 9	Bldg. portion of storm water drainage system for city.	E. D. Rightmire, City Engineer.
Ohio	Cincinnati	Aug. 9, noon	Improving trunk sewer, also laying 24-in. pipe sewer.	J. I. Wenner, Clk. Bd. Pub. Serv.
South Carolina	Newberry	Aug. 10	Extension of sewer and water systems.	M. L. Spearman, Chm. Pub. Wks. Com.
Pennsylvania	Blakely	Aug. 23, 8:30 p.m.	Constructing sanitary sewer: First Dist., 27,000 ft.; Second Dist. 18,000 ft.; size, 8, 10 and 12-in., and smaller.	A. B. Funning, Borough Engineer.
Arkansas	Rogers	Sept. 1	Furnishing material and constructing sewers.	M. A. Earl & Co., Muskogee, Okla.
WATER SUPPLY				
Massachusetts	Boston	July 29	Furnishing 2,500, 5-8-in.; 1,200, 3-4-in. and 150, 1-in. meters.	Wm. E. Hannan, Water Comr.
Illinois	Chicago	July 29	Furn. and del. 300 tons. c. i. specials, 275 tons 4 to 12-in. and 25 tons 16 to 48-in.; also for two 8x20 ft. water filters of horizontal pressure type in Rogers Park pumping station.	John J. Hanberg, Comr. Pub. Wks.
New York	New York	July 29, 2 p.m.	Laying and relaying water mains, Bronx approach to Madison avenue bridge.	I. W. Stevenson, Comr. Bridges.
Maryland	Frostburg	July 30	Excavating and bldg. reservoir 85x100 ft. diam., 15 ft. deep.	J. J. Price, Chm. Water Committee.
Massachusetts	Chelsea	July 31	Laying 5,100 ft. 12-in. and 2,800 ft. 16-in. water pipe, etc.	Geo. E. Mitchell, Chm. Water Bd.
Montana	Malta	July 31, 2 p.m.	Bldg. canals, waste water ditches and dike, in connection with Dodson, southwest of Milk River project, inc. furn. material required and excav. 400,000 cu. yds.	E. N. Savage, U.S. Reclamation Serv.
South Dakota	Waubay	July 31, 8 p.m.	Furn. and laying 1,000 ft. 4-in. mains, inc. specials and hydrants.	C. C. Bush, Town Clerk.
Texas	Anahuac	July 31	Installing three 36-in. centrifugal pumps.	Burt H. Collins, Secy. Lone Star Canal Co.
Arkansas	Clarendon	Aug. 2, 2 p.m.	Driving an 8-in. artesian well; C. H. Jenks, C.E.	Guy Murphy, Impvt. Dist.
Louisiana	Ft. St. Philip	Aug. 2, noon	Constructing water works and a sewer system, inc. trestle and steel tank and concrete reservoir.	Capt. Louis F. Garrard, Jr., U. S. A.
North Dakota	Dickinson	Aug. 2	Constructing 12 blocks of 6 and 8-in. water mains.	A. J. Osborn, City Auditor.
South Carolina	Chester	Aug. 3, noon	Furn. and install 2 wood tank gravity filters and turbine pumps motors, foot valves, gate valves and electrical equipment.	W. A. Latimer, Jr., City Treasurer.
New York	New York	Aug. 4, 2 p.m.	Furn. and installing pressure gauges in Manhattan and Bronx; hauling and setting 2 dock hydrants and removing 2; furn. and erect. traveling crane, etc., 98th st. pump station; haul and laying water mains, etc., Flatbush extension, Bklyn; furn. inside screw valves, flexible joint pipe special castings, valve boxes and covers and hydrant guards or fenders.	J. H. O'Brien, Comr. W. S., G. & E.
Nebraska	Scottsbluff	Aug. 5	Bldg. main canal and lateral system for J. G. White & Co.	Boyd Ehle, Constr. Supt., White & Co.
Oklahoma	Okemah	Aug. 5	Material and labor for w. w. and elec. light plant, inc. 1 well, 2 buildings, 2 tubular boilers, steam engine, a. c., dynamo, motor, 2 power pumps, tower and tank, pipe line, hydrants valves, etc.	P. J. Becker, Town Clerk.
British Columbia	Victoria	Aug. 6	Furn. c. i. pipe, pig lead, gate valves, etc., for w. w. system.	W. W. Northcott, Civic Purch. Agent
Utah	Salt Lake City	Aug. 6	Bldg. No. Temple st. aqueduct across 3 streets.	Louis C. Kelsey, City Engineer.
Dist. Columbia	Washington	Aug. 7, noon	Furnishing 200 fire hydrants.	Bd. of District Commissioners.
British Columbia	New Westminster	Aug. 9	74,600 ft. 24 in. and 16,000 ft. 12-in. steel pipe.	City Clerk.
Colorado	Lamar	Aug. 9, 8 p.m.	Bldg. Sec. 2; 9 miles vit. pipe line; Sec. 3; wood covered concrete reservoir 12 ft. deep, 230 ft. square, for w. w.	J. F. Curry, Town Clerk.
Minnesota	Greenbush	Aug. 10	Laying about 1,200 ft. of water mains.	A. F. Kular, Village Clerk.
South Carolina	Newberry	Aug. 10	Extending water and sewer systems.	M. L. Spearman, Chm. Pub. Wks. Com.
West Virginia	Wheeling	Aug. 11	Furn. and erecting 20,000,000-gal. triple expansion, high-duty, crane and fly-wheel pumping engine.	Mayor C. C. Schmidt, Chm. Bd. Contro
Montana	Glasgow	Aug. 11	Five miles mains, pumping station, 200,000-gal. reservoir.	E. S. Severance, City Engineer.
Ohio	Bradford	Aug. 16, noon	Material and labor for w. w. system, inc. pipe, lead, castings, hydrants, valves, pumps, engines, stand pipe, pump station.	Bd. Trustees of Public Affairs.
Washington	Sunnyside	Aug. 16, 2 p.m.	Constructing Sulphur Creek wasteway channel and structures near Sunnyside, inc. bldg. 4 1-4 miles of channel, involving 225,000 cu. yds. excav., 2,000 cu. yds. riprap, and placing 1,600 cu. yds. concrete masonry, and 130 cu. yds. paving.	U. S. Reclamation Serv., No. Yakima.
New York	Niagara Falls	Aug. 16	Furn. 9 pumps, piping, valves, etc., for new w. w.; cost, \$60,000.	Water Commissioners.
South Dakota	Pierre	Aug. 23, 3 p.m.	Drilling artesian well 1,500 ft. deep in Capitol grounds.	State Capitol Commission.
Michigan	Detroit	Sept. 14, noon	Three 30,000,000-gal. pumping engines at new station.	Benj. F. Guiney, Secy. Wtr. Comrs.
BRIDGES				
New Jersey	Jersey City	July 29	Rebldg. and reinforcing Park ave. viaduct, Hudson blvd.	J. C. Sweeney, Clk. Co. Blvd. Comrs.
Ohio	Akron	July 30, 11 a.m.	Bldg. bridge in Franklin twp.; bidders may also submit plans.	Chas. L. Worth, Clk. County Comrs.
Pennsylvania	Harrisburg	July 30, noon	Bldg. steel girder bridge with 98-ft. span, 44 ft. wide, inc. two 8-ft. sidewalks, concrete abuts., on 17th st. over P. & R. Ry.; cost, \$20,000.	W. W. Caldwell, Highway Comr.
Ohio	Findlay	July 30, noon	Bldg. reinforced bridge over Philip Heldman ditch.	Bd. County Comrs., Hancock Co.
Virginia	Richmond	July 30	Bldg. 70 ft. steel span or two 34-ft. rein. conc. spans, Caro. Co.	P. St. J. Wilson, State Hwy. Comr.
Dist. Columbia	Washington	July 31, noon	Removing old Anacostia bridge, foot of 11th st., S.E.	H. B. F. Macfarland, Pres. Bd. Comrs.
Virginia	Woodford	July 31	Bldg. steel or concrete bridge.	Geo. P. Lyon, County Supervisors.
Tennessee	Newport	July 31, 2 p.m.	Bldg. steel bridge over Pigeon river, bldg. 70 miles road, etc.	B. W. Hooper, Secy. Co. Pike Com.
Ohio	Jefferson	Aug. 2, 1 p.m.	Bldg. plate girder bridge with rein. concrete floor over creek.	J. S. Matson, County Surveyor.
Minnesota	Minneapolis	Aug. 2	Rebuilding bridges Nos. 60, 340, 341 and 342.	Hugh R. Scott, County Auditor.
Maine	Bangor	Aug. 2, noon	Repairing and reinforcing foundation of bridge over Penob.	John F. Woodman, Mayor.
Indiana	Delphi	Aug. 2, noon	Bldg. approach to McGrevey bridge, Rockcreek twp.	M. G. Haun, County Auditor.
Ohio	Zanesville	Aug. 2, noon	Mat. and labor for substructure of hwy. bridge New twp.	L. E. Berelsford, County Auditor.
Florida	Quincy	Aug. 2	Erecting 110 ft. steel bridge with 50 ft. spans or trestles.	T. R. Canty, Clk. County Comrs.
Ohio	Springfield	Aug. 2, 10:30 a.m.	Repair of Enon bridge No. 3 in Madison River township.	H. G. Wright, County Comr.
Mississippi	Meridian	Aug. 2, 2 p.m.	Constructing wooden bridge over Baker creek.	W. R. Pistole, Chancery Clerk.
Wisconsin	Baraboo	Aug. 2, noon	Bldg. steel or concrete bridge over river to town of Baraboo.	W. H. McPetridge, Chm. Street Com.
Washington	Southbend	Aug. 2	Bldg. bridge with abutment and approaches over Willaka river, alt. bridge on steel span, comb. span and wooden span, and for cylinder concrete piers and framed bent and pile piers.	John R. Gralteo, Chm. Co. Comrs.
Ontario	Toronto	Aug. 3, noon	Bldg. bridge on extension of Harbord st. over Beatrice st.; rein. concrete arch, 35 ft. span, 42 ft. rdwy. and two 6-ft. walks, containing 1,500 cu. yds. concrete.	Board of Control.
Indiana	Crawfordsville	Aug. 3, 10 a.m.	Constructing bridge for county.	B. B. Engle, County Auditor.



## BIDS ASKED FOR

STATE	CITY	RECEIVED UNTIL	NATURE OF WORK	ADDRESS INQUIRIES TO
BRIDGES—Continued				
Indiana.....	Covington.....	Aug. 3, 1:30 p.m.	Constructing 3 bridges and repairing one.....	W. B. Gray, County Auditor.
Indiana.....	Rushville.....	Aug. 3.....	Two concrete arches, boulder finish for cemetery.....	Stewart & Kennedy, Engineers.
New Jersey.....	Perth Amboy.....	Aug. 5, 11 a.m.	Bldg. 4 concrete culverts, from 4 to 15 ft. long.....	Morgan F. Larson, County Engr.
Ohio.....	Springfield.....	Aug. 9.....	Rebldg. Moores Lime Co. bridge, No. 1008, Springfield twp.....	J. E. Lowry, Chm. County Comrs.
California.....	Oakland.....	Aug. 11, 11 a.m.	Bldg. concrete culvert in Glen Echo creek; bond, \$3,500.....	W. B. Fawcett, Secy. Bd. Pub. Wks.
Ohio.....	Cleveland.....	Aug. 11, 11 a.m.	Bldg. concrete bridge on Spencer Road, Rocky River twp.....	Wm. F. Black, Clk. County Comrs.
Ohio.....	Akron.....	Aug. 12.....	Extending Kenmore bridge over Ohio Canal.....	Chas. L. Wirth, Clk. County Comrs.
Arizona.....	Phoenix.....	Aug. 16.....	Bldg. \$100,000 rein. concrete bridge over Salt River.....	Bd. Supervisors, Maricopa County.
Oklahoma.....	Lawton.....	Aug. 16.....	Constructing nine steel bridges for county.....	Board of County Commissioners.
Maine.....	Rumford.....	Aug. 17, 2 p.m.	Furn. material and bldg. bridge 600 ft. long over Androscoggin river, requiring 700 cu. yds. masonry for Town Selectmen.....	E. E. Greenwood, Engr., Skowhegan.
North Carolina.....	Asheville.....	Aug. 17.....	Plans, etc. for bldg. steel, concrete or combination bridge over French Broad river, 900 ft. long, 23 ft. in clear, 30 ft. wide, besides 6-ft. walkway.....	J. E. Rankin, Chm. County Comrs.
New Jersey.....	Elizabeth.....	Aug. 30.....	Constructing hwy. bridge over Rahway river, Cranford.....	Jacob L. Bauer, County Engr.
Minnesota.....	Minneapolis.....	Sept. 1.....	Furn. designs, detail plans, etc., for several bridges; 3 prizes.....	Board of Park Commissioners.
LIGHTING AND ELECTRICITY				
Kentucky.....	Cynthiana.....	Aug. 2, noon.....	Lighting sts., alleys and public places for 6 or 10 years, from Apr. 1, 1910, with 40 or more arc or 90 or more 40 c.p. incandescents; light for all and every night or dark nights only; further information of W. W. Van Deren.....	W. M. Moore, Chm. Finance Com.
Manitoba.....	Winnipeg.....	Aug. 2, 11 a.m.	Bldg. and erecting hydraulic, electric and auxiliary equipment of municipal generating station on Winnipeg River.....	H. N. Ruttan, City Engineer.
Pennsylvania.....	Sewickley.....	Aug. 3, 8 p.m.	Municipal lighting of boro.; 100 most approved arc lights, with arc lights, incandescent lamps as adjuncts in certain sts.; also schedule of rates for commercial lighting with franchise for erecting poles, wires, etc.; control to be for 7 years and franchise for 25 years.....	M. M. Baker, Boro. Engr.
New York.....	New York.....	Aug. 3.....	Furn. and delivering 1,400 lamp posts in Manhattan.....	M. F. Loughman, Dept. W. S., G. & E.
Oklahoma.....	Okemah.....	Aug. 5.....	Constructing electric light and water plant: 2 bldgs., 2 tubular boilers, steam engine, a. c. dynamo, motor, 2 power pumps, pole and wire line, st. lamps, etc.....	M. A. Earl & Co., Engrs., Muskogee.
Manitoba.....	Winnipeg.....	Aug. 16.....	Five 3,000 k.w. generators, two 250 k.w. generators, etc.; six step-up transformers; light, heat, and power systems; protective apparatus; 3 electric traveling cranes; auxiliary apparatus. Smith, Kerry & Chace, Engrs., Toronto, Ont.....	M. Peterson, Sec'y Bd. Control.
Ohio.....	Columbus.....	Aug. 18.....	Furn. and installing complete electric lighting equipment in county jail, inc. fixtures, lamps, conduits, wires, etc.....	John Scott, Clk. Co. Comrs.
MISCELLANEOUS				
New York.....	New York.....	July 29, 3 p.m.	Furn. and erect. electrically-welded wire fence with reinforced concrete and wood posts, easterly extension of Bronx Park.....	Henry Smith, Pres. Park Bd.
Tennessee.....	Nashville.....	July 29.....	Competitive plans for \$12,000 comb. fire and police sub-station.....	J. D. Alexander, Chm. Bd. Pub. Wks.
North Carolina.....	Whiteville.....	Aug. 2, noon.....	Bldg. modern county jail. L. F. Leitner, Arch., Wilmington.....	C. C. Pridden, Chm. County Comrs.
Ohio.....	St. Henry.....	Aug. 3, noon.....	Samples of hose, nozzles and reels; village to buy 1,000 ft. hose.....	Wm. H. Romer, Village Clerk.
Pennsylvania.....	Wilkes-Barre.....	Aug. 5.....	Furnishing and delivering one or more motor-propelled or horse-drawn comb. chemical engine and hose wagons.....	Fred H. Gates, City Clerk.
Maryland.....	Baltimore.....	Aug. 8, 11 a.m.	Removal and final disposition of street sweepings and other refuse from Aug. 8, 1909, to Aug. 8, 1910.....	J. L. Wickes, Com. St. Cleaning.
Illinois.....	Chicago.....	Sept. 15.....	Furn. voting machines up to \$400,000 value.....	Election Commissioners.
Kentucky.....	Guthrie.....	Oct. 1.....	Furn. and erecting 15-ton ice plant for Todd Co. Ice and Elec. Co.....	L. M. Balee, Sec'y Ice & Light Co.

## STREET IMPROVEMENTS

**Ashville, Ala.**—St. Clair County Commissioners have decided to construct six miles of road across Backbone Mountain.

**Gadsden, Ala.**—Council has not yet decided on the material to be used in the paving of the business section.

**West End, Ala.**—Council is considering the improvement of Tuscaloosa ave. from Green st. to the western city limits, Hawkins st., Pearl st., 3d st. and Poplar st.; the latter with Lancaster macadam pavement.—S. P. DeJarnette.

**El Dorado, Ark.**—El Dorado is soon to make an almost necessary improvement of considerable magnitude—that of opening the public square, the principal streets and drives, and all the streets leading out from the square for at least one block; two streets running from the square to the Iron Mountain depot are to be included in the paving proposition.

**Jonesboro, Ark.**—Council is considering the paving of Main and Union sts. from Jackson st. to Johnson st.

**Marianna, Ark.**—Plans are being prepared by B. C. McGehee, Little Rock, for 16,000 yds. of vitrified brick paving in District No. 1; cost \$35,000.—E. J. Beazley is interested.

**Globe, Ariz.**—The Territorial Board of Control is willing to co-operate with the Gila County Board of Supervisors in improving the road between Globe and Roosevelt.

**Emigrant Gap, Cal.**—George W. Kimble, of the field staff of State Engineer Nathaniel Ellery, is preparing to begin the improvement of the road from Emigrant Gap to Donner Lake, as provided by a bill fathered in the last Legislature by State Senator E. S. Birdsall, from the 10th District; appropriation for this work was \$15,000, of which \$10,000 will be forthcoming this year, and the balance next year; Engineer Kimble estimates that he can put the road in the proper shape for \$6,000, leaving a balance of \$9,000 for finishing touches next year; worst spots are the Crystal Lake and Summit crossings; distance is 26 miles.

**Oakland, Cal.**—Mayor Mott has signed ordinance giving permission to the Board of Public Works to establish a municipal asphalt plant in connection with the cor-

poration yards and the street department equipment; cost \$3,000.

**San Francisco, Cal.**—The Board of Supervisors has decided to appropriate \$34,000 provided the residents and adjacent property owners subscribe a like sum, for the improvement of San Bruno ave. with basalt rock.

**San Jose, Cal.**—Resolutions of intention to construct cement curbs and gutters on the following streets have been given first reading: Market, from Bassett to Julian; Park ave., from Market to Orchard; Carlisle, from River to Pleasant; Pleasant, from Martel to Carlisle; Orchard, from Post to San Fernando; Orchard, from Santa Clara to Post; San Salvador, from 8th to 6th. For the construction of artificial sidewalks: Old Market, from Bassett to Julian; 6th, from San Carlos to San Salvador; 5th, from Reed to Margaret; 7th, from Margaret to Virginia.

**Denver, Col.**—The Board of Public Works will expend \$75,000 for street improvements in district bounded by 36th and 37th, York and Steele sts.

**Denver, Col.**—Plans have been prepared for the improvement of District No. 9 by grading, curbing and surfacing; cost \$25,426.

**Waterbury, Conn.**—The State Highway Commissioner has engineers at work on surveys and maps for a \$75,000 trunk line of highways through Connecticut to the Berkshires, via Waterbury, from Canaan to Winsted, and if plans do not miscarry work on this stretch will be started early next year.

**Ocean View, Del.**—Town Board has received an appropriation from the County Commissioners and will begin work at once to straighten and gravel the road to Millville.

**Pensacola, Fla.**—The Board of Works has \$7,000 additional to put the streets of the city in condition which are not to be paved under the new paving law.

**St. Augustine, Fla.**—Valencia st. will be partially relaid with vitrified brick, while the remaining sections will be thoroughly repaired as will the other asphalt streets.

**Brunswick, Ga.**—Senate has passed the bill authorizing Glynn county to issue \$100,000 bonds for constructing roads and bridges.

**Macon, Ga.**—Citizens will vote November 3 on \$100,000 bonds for paving.

**Aurora, Ill.**—City is considering installation of a municipal asphalt plant for small repair jobs and laying short sections of paving on which the larger asphalt concerns will not bid; cost about \$2,000.

**Aurora, Ill.**—Council is considering the paving with brick of Superior st. from Lincoln ave. to Ohio st.

**Batavia, Ill.**—Council has passed both the East and West Batavia paving ordinances, covering improvements aggregating \$72,626.12; brick and asphalt will be the material for East Wilson st. and tarvia, a patent macadam-covered asphalt paving, for West Wilson st.

**Cairo, Ill.**—The Singer Manufacturing Co., the E. Bucher Packing Co., and the Big Four Railroad have instructed the City Engineer to call for bids for the paving with brick of Commercial ave. between 34th and 38th sts.; work is to be in accordance with the specifications of the city for improvements of this nature; bids will be opened on July 28.

**Cairo, Ill.**—The Board of Local Improvements has decided to pave 2d st.

**Cairo, Ill.**—Council is considering the improvement of Walnut st. and Holbrook ave. at a cost of \$77,471.99 and 21st st. at \$32,155.74.

**Decatur, Ill.**—Council has approved ordinance providing for the paving of West Wood, West Macon and McClellan aves.; cost \$35,000; Division, Hickory, Warren and Center sts. \$44,000, and East Decatur and South Jackson sts., \$25,496.

**Waukegan, Ill.**—The Board of Local Improvements has passed a resolution for paving Clayton st. from Sheridan road to Harbor block.

**Booneville, Ind.**—City will macadamize Sycamore and three other streets.

**Vincennes, Ind.**—The Board of Works has decided to improve Manila st. in North Vincennes from 2d to Baret ave. by grading, graveling, sidewalking and curbing; also to improve two alleys.

**Charlton, Ia.**—Council has decided to pave Braden ave. with brick.

**Clinton, Ia.**—Council is considering the paving of 3d ave. with creosoted block.—R. C. Hart, City Engineer.

**Hutchinson, Kan.**—W. L. Spoon, government engineer, is urging the necessity of good roads in this district; he has recommended that the immense amount of



fine sand available be carefully mixed with the clay on the surface of the road; also that the roadbed have a crown of 18 in. in the center for a road 36 ft. wide; estimated cost about \$1,500 a mile.

**New Orleans, La.**—The City Engineer has prepared plans and specifications for the paving of City Park ave. from Bayou St. John to Canal st. with mineral sarco asphalt, and the Comptroller will advertise for bids for the paving of this thoroughfare with the material designated by the petitioners of the street.

**Shreveport, La.**—Citizens will vote August 3 on \$50,000 bonds for street paving.—S. A. Dixon, Mayor.

**Baltimore, Md.**—A delegation of West Baltimoreans, headed by City Councilman McCurdy of the Fifteenth Ward, and including members of the Harlem Improvement Association, appeared before the Board of Estimates and urged that body to pledge itself to provide in the next ordinance of estimates sufficient funds for the paving of Edmondson ave., from Gilmor st. to the Pennsylvania railroad bridge, with improved paving.

**Baltimore, Md.**—The Board of Public Improvements has taken final action on the grade crossing ordinance drawn up about two weeks ago by the City Council Committee on Railways and has sent it to the Board of Estimates, with such amendments that it is practically a new ordinance; after the Board of Estimates considers and amends it it will be sent to the Council for action; new plan provides for crossings at Lee, Hamburg, Stockholm and Cross sts., with 21-ft. roadways on the bridges and a 10-ft. sidewalk on the south side of each bridge.

**Elkton, Md.**—The County Commissioners of Cecil County have awarded the entire issue of \$25,000 worth of road bonds to Hambleton & Co. and Baker, Watts & Co., jointly, of Baltimore, at their bid of \$105,583 with accrued interest.

**Lawrence, Mass.**—Council has adopted an order to instruct the City Solicitor to petition the Justices of the Supreme Court to appoint a railroad commission to abolish all Boston & Maine grade crossings.

**Lynn, Mass.**—Council has ordered the following street improvements: Putting Lexington st. to grade; laying crosswalks at Boston and Carnes, Michigan and Ocean, Essex and Empire, Boston and Flint, Baker and Arlington, across Ocean from Red Rock to King's beach terrace, Summer and Linden, River and Burns and Belle ave. and Ashland; relaying crosswalks on Maple st. between Chestnut and Chatham; laying granolithic sidewalks on Lawton ave. between Henry ave. and Blair, Pickford Place, Rockaway, and on south side of Western ave., between Bay View ave. and Chestnut st., except where good permanent walks are now in existence.

**Highland Park, Mich.**—City is considering the paving of Woodland ave. at a cost of \$105,000.—Geo. Jerome, Majestic Bldg., Detroit, Engineer; R. M. Ford, City Clerk.

**St. Joseph, Mich.**—Council has passed a resolution authorizing the Clerk to advertise for bids for paving Water and Vine sts.; City Engineer has been instructed to prepare plans, specifications and estimates of cost for paving with brick alley between Market, Elm, State and Main sts.

**Bovey, Minn.**—Plans are being prepared by the Duluth Engineering Co., Palladio Bldg., Duluth, for two blocks of brick paving.

**Duluth, Minn.**—The County Board has appropriated \$10,900 for the improvement of county roads; cost of improving East Duluth and Lester River road for  $\frac{1}{2}$  miles has been estimated at \$14,000.—E. K. Coe, Road Engineer.

**Duluth, Minn.**—The Board of Public Works is considering construction of five blocks of brick paving on 25th ave E.—R. Murchison, Clerk.

**Minneapolis, Minn.**—A committee headed by Fred Barney and George M. Gillette is at work securing the necessary property for the proposed University ave. parkway, which will extend from Bridge Square to the University of Minnesota.

**Carthage, Mo.**—The City Engineer has been ordered to prepare an estimate for the grading and graveling of Fulton st. between 6th and Chestnut sts., a distance of two blocks.

**Clinton, Mo.**—Bids will be received very soon for three-fourths of a mile of brick paving on 2d st.—R. Bellsie, City Clerk.

**St. Joseph, Mo.**—Council will pave Mary st. from 24th to 27th st.; material not yet selected.

**Omaha, Neb.**—Council is considering the paving of 17th st., between Webster and Cumming sts., and the repaving of Harney st., between 10th and 15th sts.; Cass st., between 11th and 13th sts., and 18th st., between Cumming and Nicholas sts.

**South Omaha, Neb.**—Mayor Frank Koutsky has been visiting Milwaukee in order to inspect the paving.

**Reno, Nev.**—Following an official trip and inspection, the County Commissioners have announced that work will begin at once on road direct from Reno to Incline on Lake Tahoe; new road will be 22 miles in length and will give Reno its first direct connection with Tahoe City and other lake points.

**Atlantic City, N. J.**—City will pave Main ave., from Mediterranean ave. to Caspian ave.

**Bayonne, N. J.**—City Engineer Dalrymple has presented plans and specifications for the improvement of 17th st. between Ave. C and Broadway, 25th st. between Broadway and the Boulevard, 27th st. between the Boulevard and Avenue E, and 43d st. between Ave. E and the Boulevard.

**Bergenfield, N. J.**—Bids will be received July 28 by Council for grading and macadamizing Arlington and Bedford aves.—W. C. Clark, Borough Engineer, Hillside ave., Tenafly.

**Jersey City, N. J.**—Bridge and road improvements costing approximately \$1,000,000 are planned along the Plank road by the Boards of Freeholders of Essex and Hudson counties; joint committee has adopted plans offered by the County Engineers for a wide roadway between the Hackensack and Plank road bridges, and for a new bridge to replace the old Plank road structure across the Passaic.

**Kingsland, N. J.**—An ordinance has been ordered drawn up providing for the construction of sidewalks in Ridge road, between Rutherford and 2d aves.

**Long Branch, N. J.**—The new Monmouth Road drive will be an added shore attraction for motorists next year; plans and specifications of the gravel road to extend from Cedar and Norwood aves., Long Branch, through the Borough of West Long Branch, to the Eatontown Boulevard, have been accepted by the Monmouth County Board of Chosen Freeholders. Bids will be invited at a later date, and the building of the new road will be started in the early fall. Plans and specifications of Engineer Peter Forman for the second section of the Lakewood-Adelphia road have also been accepted by the Board and bids will be invited.

**Orange, N. J.**—Council has passed an ordinance for the opening of Mountain View ave. from Scotland st. to Lincoln ave.; other ordinances for improvements on Chestnut st., from Scotland st. to the West Orange line, were also adopted.

**Paterson, N. J.**—Specifications for the wood block paving on Totowa ave. have been changed by the Board of Works to permit the ties of the Public Service's line to be laid on a bed of loose broken stone instead of upon solid concrete; in return for the concession the Public Service Corporation has agreed to pave North Main st. between North Straight and East Main sts. between their rails and 18 inches on each side of the rails.

**Phillipsburg, N. J.**—Council has renewed the fight to do away with the many dangerous railroad grade crossings and narrow culverts within the limits of the municipality. The State Railroad Commission will be called upon to sit here and receive data on which a ruling may be made. Mayor Firth has been authorized to incur any expense necessary to secure data to submit to the State Commission in the near future.

**Trenton, N. J.**—Council has passed an ordinance for the asphaltting of 2d st. from Broad to Lalor sts.; the paving of Freeman Lane from Monmouth to Chambers st. and Decatur st. from Market to Fall sts. with vit. brick and Hancock st. from Fremont to Cass sts. is also being considered.

**Woodbury, N. J.**—Mayor Ladd has vetoed the ordinance for the improvement of South Broad st., but approved the ordinance to improve Euclid st. and Newton ave. with bitulithic.

**Albany, N. Y.**—Bids will be received July 28 by the Board of Contract and Supply for improving the following streets: Montgomery st., Lincoln and Washington aves., grading, curbing, paving with vitrified brick, repaving, and laying sidewalks, etc.; Mohawk st., paving with granite blocks, laying sidewalks, etc.; Knox st., viaduct, repaving with vitrified block and relaying sidewalks.—Isidore Wachsmann, Secretary.

**Auburn, N. Y.**—Plans and specifications for the new asphalt pavement in Hoopes ave., as presented by the City Engineer, have been approved.

**Buffalo, N. Y.**—Mayor Adam has signed the resolution adopted by the Common Council ordering the filling in and macadamizing of the Hamburg turnpike.

**Herkimer, N. Y.**—Bids will be received August 2 for the purchase of \$60,000 highway improvement bonds.—Frank Senior, County Treasurer.

**Little Falls, N. Y.**—The City Engineer has been instructed to proceed at once with the improvement of East Monroe st., which is to have a tarvia top dressing to hold it together, and to make maps and

specifications for macadamizing Church st., this job to be done by contract.

**Niagara Falls, N. Y.**—City Engineer R. A. McClanathan has estimated the cost of paving a portion of 7th st. at \$19,035.

**Olean, N. Y.**—Citizens have voted \$119,000 bonds for the purchase of a steam road roller, construction of sewers and water works, and erection of three fire houses.

**Poughkeepsie, N. Y.**—The Board of Public Works has decided to pave Union square with vitrified brick and have it curbed and guttered with combined concrete. Church st. will also be paved as far as the house of Young America Hose Co.

**Sylvan Beach, N. Y.**—Town has ordered cement walks for the Armstrong block on the east side of Railroad ave.

**Watertown, N. Y.**—The Board of Public Works will let contracts for the paving of Le Roy and Main sts.

**Watertown, N. Y.**—In an effort to further improve the roads of this county oil will be used on a stretch of highway between Adams Center and Talcott's stand, a distance of three miles; work of oiling the road will begin within a few weeks and will be under the supervision of Highway Inspector Gus Rogers.

Some important work in repairing stretches of State roads in this county, involving an expenditure of about \$40,000, is being mapped out by G. H. Miller; work will begin in August; repair contracts are for the following stretches: Sackets Harbor road, for a distance of three miles, an asphalt top will be used where the road has grown thin; Depot road, at Three Mile Bay, distance one mile, ordinary macadam will be used; Alexandria Bay road, southeast towards Redwood, three miles, asphalt macadam to be used; State road at Loraine, one mile, ordinary macadam; Pierrepont Manor road, three miles, resurfaced, and Burrs Mills road, half in the town of Watertown, half in the town of Rutland, two and three-quarter miles, straight macadam to be used.

**Yonkers, N. Y.**—City has awarded \$40,000 road improvement bonds to Kountz Bros.

**Washington, N. C.**—City is considering the asking of the Legislature for authority to issue \$25,000 bonds for street improvements.

**Grand Forks, N. D.**—City officials have visited Duluth for the purpose of getting pointers on the proper paving materials to use in street improvements.

**Circleville, O.**—City is considering the paving of Court st. with 50,000 sq. yds. of either brick or asphalt block and setting 17,000 lin. ft. of Berea stone curbing.—Henry Schleyer, President.

**Cleveland, O.**—Park Engineer Stinchcomb has estimated the cost of improving the tract of land on Superior ave., N. E., that has just been acquired for the widening of the boulevard, at a point adjoining the northwesterly portion of the bridge over the lower boulevard, at about \$20,000.

**Dayton, O.**—Council is considering ordinances to provide for treating with oil for purposes of laying dust on and preserving surface of streets, alleys, squares and public roads by contract; also the issue of a \$5,800 bond issue for extension of 2d st.

**Dayton, O.**—City Engineer Cellarius has submitted to the Service Board the estimated cost of making improvements on several thoroughfares. The plans and specifications were also filed; they are: Grading and graveling St. Nicholas ave. from Lorain to St. Charles ave., \$1,762.50; for setting combined curb and gutter and cement sidewalks on the same thoroughfare, from Lorain to Wyoming, \$4,226.60; for grading and graveling the roadway from St. Charles to Wyoming, \$1,387.50; for setting combined curb and guttering on Belmonte ave., from Florence to Grand, the price is 65c. per lin. ft.; for making sidewalks on Fluhart ave., from Cincinnati st. to lots Nos. 20,807 and 20,866, and on Superior ave., from Central to alley west, the cost is 12c. per sq. ft., and for paving Wyoming st. from Phillips to Creighton ave. with brick at \$3,819.57, and with asphalt at \$1,890.97.

**Ironton, O.**—The Board of Public Service will lay 7,530 yds. of brick paving and 3,000 ft. curb and gutter on 4th st.—C. H. Ketter, President.

**Marion, O.**—The Board of Commissioners of Marion County will advertise for bids for resurfacing and repairing Schotte road, Bowling Green Township, Radnor, Marion, Prospect, Muten and Guthrey pikes.

**Massillon, O.**—Council will issue \$1,614 bonds for improving portion of East Tremont, Andrew and Clay sts.

**Norwalk, O.**—City will call for bids for the paving of East Elm st., from Benedict to Linwood ave.

**Portsmouth, O.**—The Board of Public Service will soon advertise for bids for 16,000 sq. yds. of brick paving on 12th st. and 7,250 sq. yds. of brick paving on 7th st.—George Schneider, President.

**Tiffin, O.**—City Engineer C. J. Peters will prepare plans for paving Hall st. from Sandusky st. to Wall st.

**Wauseon, O.**—The Ohio Savings Bank and Trust Co., of Toledo, bid par, accrued interest and \$826.93 premium on \$67,200 road improvement bonds and were awarded the contract by the commissioners.

**Xenia, O.**—The State Highway Department will soon advertise for bids for paving the Xenia-Wilmington road with macadam.—J. C. Wonders, Columbus, Commissioner.

**The Dalles, Ore.**—Council has passed an ordinance calling for paving with bitulithic pavement of 2d st. and the laying of sewers on same.

**Clifton Heights, Pa.**—E. J. Geiger has offered a resolution which was adopted, that the Highway Committee of Council be authorized to advertise for proposals for the opening, grading and macadamizing of the several streets, as follows: That Harrison ave., between Springfield ave. and Diamond st., be graded according to the established grade of the borough, and that Broadway, between Edgmont and Marple aves. be macadamized; also that Marple ave., between Broadway and Washington ave., be macadamized.

**Johnstown, Pa.**—Council has finally passed an ordinance providing a \$100,000 bond issue for street improvements.

**Meadville, Pa.**—Bids will be received by the Selectmen and Common Councils July 28 for paving Popular, Arch and Alden sts. with vitrified brick, about 10,000 yds.—H. S. Robinson, City Clerk.

**Pittsburg, Pa.**—Ten of the most prominent engineers in the United States will be appointed to investigate and report on the most desirable location in the county for the first great highway to cross the Monongahela River connecting the vast South Hills territory on the south side of the Monongahela River with the center of the city of Pittsburg to relieve the congestion of the crowded downtown districts; applications for a charter were to be heard in Harrisburg July 21, but the officials most concerned accepted the advice of the incorporators and asked that nothing be done until they had a proper board of competent engineers pass upon the plans.

**Uniontown, Pa.**—Ordinances for the paving of four of the principal streets of the borough have been passed by Council.

**Westmont, Pa.**—Citizens will vote August 17 on \$16,000 bonds for the paving of the remaining streets of the borough.

**West Scranton, Pa.**—Common Councilman Thomas W. Thomas of the Fourth Ward will introduce an ordinance for the paving of Price st. from North Main ave. to North Garfield ave.; Mr. Thomas will also introduce an ordinance for the grading of Lafayette street at the expense of the city.

**Williamsport, Pa.**—The Finance Committee has approved the ordinance appropriating \$250 to pay for an expert to inspect the proposed repairs to the asphalt streets. The committee fixed the pay of the expert to not exceed \$7 per day.

**York, Pa.**—Bids will be received about July 28 for the paving of eight streets; material not yet decided on.

**Clinton, Tenn.**—Anderson county will advertise bids about August 15 for construction and completion of pike roads; \$100,000 available; engineer will be selected about same time.—J. K. P. Wallace, Road Superintendent.

**Jefferson City, Tenn.**—Commissioners W. R. Manad and Hal Harris, of Dandridge, and A. C. Parrott, of Straw Plains, together with Eugene F. Phillips, have been surveying the route through the city, locating the pike road from New Market to the Hamblen county line; this is one of the new lines of roads to be built in the county embraced in the \$127,000 bond issue recently made by the county.

**Abilene, Tex.**—Citizens have voted \$50,000 bonds for street improvements.

**Beaumont, Tex.**—A resolution has been adopted instructing the Mayor to purchase oil and equipment for oiling all the shelled streets in the city.

**Dallas, Tex.**—Commissioner Wm. Doran has prepared resolutions ordering the paving with permanent material of sections of Austin, Jackson and Harwood sts; it is expected these streets will be paved with brick, although the resolutions order bids to be taken on bitumen, bitulithic, brick and asphalt; Austin st. is to be paved from Pacific to Commerce, except the Main and Elm sts. intersections; Jackson is to be paved from Santa Fe to Austin; Harwood is to be paved from Jackson to Commerce, or one block.

**Fort Worth, Tex.**—Citizens have defeated proposed \$1,000,000 bond issue for good roads.

**Houston, Tex.**—Harris county will vote August 3 on \$500,000 bonds for street and bridge improvements.

**Longview, Tex.**—Citizens have voted \$30,000 bonds for street improvements.

**Plainview, Tex.**—Citizens plan to grade the entire town.

**Sherman, Tex.**—City is considering the laying of a concrete sidewalk from Court-house square to Missouri, Kansas & Texas Railroad.—John C. Wall, Mayor.

**Waco, Tex.**—Citizens have voted \$75,000 for improving streets and building steel bridges.

**Alexandria, Va.**—Work of paving the upper end of King st. from the city limits to the new union passenger station will be begun very soon.

**Danville, Va.**—Citizens will vote September 28, on \$65,000 bonds for paving West Main st. and \$10,000 bonds for street improvements in the 5th and 6th Wards.

**Lynchburg, Va.**—City will issue \$400,000 bonds for street improvements.—H. L. Shaner, City Engineer.

**Orange, Va.**—Madison District has voted \$25,000 bonds for the construction of macadam roads between Orange and Gordonsville.

**Richmond, Va.**—Council is considering the expending of about \$37,000 in paving and grading.

**Staunton, Va.**—Citizens of Staunton and Augusta county have decided to make a determined effort to raise \$1,000,000 by a bond issue and construct a road from this city across the Blue Ridge mountains.

**Anacortes, Wash.**—Council has rejected all bids for the improvement of Commercial and 9th aves. and will soon call for new bids.

**Ellensburg, Wash.**—M. M. Emerson, Kittitas County Engineer, has outlined a plan for building 35 miles of trunk roads in Kittitas county, at an approximate cost of \$70,000; he proposed to have the county raise the money by bond issue; roads he proposed to improve at once follow: A lower bridge road three miles long extending from Main st. in Ellensburg across the lower bridge to the Shushuskin canyon; an upper bridge road, eight miles long, extending from Ellensburg across the upper bridge to Thorp; a trunk line road extending for five miles from Ellensburg to Dry Creek; a northeast trunk line road extending seven miles via the Sanders ranch towards the mouth of the Nanum; a southeast trunk line road extending twelve miles from Ellensburg into Denmark and Badger Pocket districts.

**Puyallup, Wash.**—Because an article in the paving specifications was contrary to a ruling of the State Supreme Court, the opening of the bids which was to have taken place at Council meeting, July 14, was postponed two weeks; although it will delay the letting of the contract it will not necessarily delay operations because of the various steps to be taken yet before activities can begin.—D. P. Wheeler, City Engineer.

**Seattle, Wash.**—Council has appropriated \$2,700 for the planking of Western ave. from University st. to Lenora st.

**Spokane, Wash.**—Two bids for the paving of Howard st. from the Spokane River to Spofford ave. have been opened by the Board of Public Works and rejected, both bids being above the engineer's estimate of cost, and a slip was made in failure to provide a maintenance bond; the engineer's estimate for the work was \$54,000. J. A. Clark bid \$59,000 and the Independent Asphalt Co. \$63,700.

**Tacoma, Wash.**—Council has passed ordinances for the improvement of South 46th st. from Shendon to McKinley ave. and Court C. from South 9th to 15th sts.

**Morgantown, W. Va.**—Council has directed that bids be advertised for the paving of a number of streets, the most important item in the budget being the paving of Stewart st. to the city limits from the end of the present paving.

**Wheeling, W. Va.**—Council has adopted the report of the Committee on Streets, Alleys and Grades relative to the apportionment of street improvements under the bond issue and directed the work to be done under the direction of the Board of Control, who will advertise for bids and take care of all matters connected with it; the \$150,000 appropriated for the purpose was divided among the different wards as follows: First, \$14,000; Second, \$17,000; Third, \$14,000; Fourth, \$3,166.57; Fifth, \$5,692.80; Sixth, \$25,000; Seventh, \$35,750; Eighth, not apportioned as yet.

**Oconomowoc, Wis.**—City did not receive any bids for grading Oak st.—Elsworth Olson, City Clerk.

**Watertown, Wis.**—Council has ordered brick or cement sidewalks on 10th, Lafayette and Emmet sts.

**Waukesha, Wis.**—Council has passed an ordinance for extending Woodward ave. from Beechwood ave. to Huron st. and to extend the water main west on St. Paul ave. to a point opposite the Keeley Institute.

**New Westminster, B. C., Can.**—Council has decided to expend \$79,000 in street improvements; \$18,000 of this is for the paving of Columbia st.

## BIDS RECEIVED AND CONTRACTS AWARDED

**San Bernardino, Cal.**—Council has awarded contract to E. R. Werdin & Co. for paving 3d st. from G st. to the Santa Fe depot; his bid was \$12,824.70, which was nearly \$5,000 lower than the estimate made by the Engineers in getting up the report on which the bond election was called; the other bids were: Barber Asphalt Co., \$17,983.03; Johnson-Shea Co., \$16,159; Fairchild-Gilmore Co., \$15,125.56. The Engineers' estimate was \$17,400. The contract for paving Rialto ave. from Mt. Vernon ave. to the west city limits was let to the Johnson-Shea Co. for \$3,228.22, the other bids being that of B. F. Ford, for \$3,233; Rife & Cave, \$3,247.72, and the Highway Construction Co.'s bid on this work was \$3,399.65.

B. F. Ford was awarded the contract for paving Base Line from Arrowhead ave. to Waterman ave. on a bid of \$9,050.38. The other bids were: Rife & Cave, \$9,534.35; Highway Construction Co., \$9,521.13, and Johnson-Shea Co., \$9,911.66. The estimate of the Engineers was \$9,520.60.

The Highway Construction Co. was also awarded a contract for the paving of 3d st. from Arrowhead ave. to A st., at \$5,608.10. The bid of B. F. Ford was rejected on account of irregularity. The other bids were: Rife & Cave, \$6,142.59, and Johnson-Shea Co., \$6,017.19. The Engineers' estimate was \$5,894.50.

**San Jose, Cal.**—But one bid was received for the improvement of South Market st.—that of the City Street Improvement Co., as follows: Pavement, per sq. ft., 23½c.; curbing, per lin. ft., 45c.; gutter, per sq. ft., 24c.; catch basins, \$40 each; drain pipes, \$1 per lin. ft.; the bid was referred to the Finance Committee.

**Hartford, Conn.**—Highway Commissioner MacDonald has awarded contracts for three pieces of road as follows: Old Saybrook, 10,000 lin. ft. of macadam and telford, to B. M. Peard Co., of Shelton; the macadam at \$1.38 per lin. ft. and \$1.70 for telford; cobble gutters, 60c. per sq. yd.

Milford, 10,005 ft. of macadam and telford, to Frank Arrigoni & Brother, of Durham; \$1.95 for macadam and \$2.45 for telford.

Orange, 7,250 lin. ft. of macadam and telford, to C. W. Blakeslee & Son, of New Haven; the macadam at \$3.45 per lin. ft. and the telford at \$3.95.

for telford and 65c. a sq. yd. for cobble gutter; the contract involves heavy cuts and fills and the cost will be nearly \$30,000.

**Dover, Del.**—The Street Commission, July 14, awarded Dover's paving contract to the United Paving Co., of Atlantic City, for \$78,129.84. This was the lowest of several New York, Philadelphia and Richmond bids.

**Moline, Ill.**—The Board of Local Improvements, July 10, awarded the contract for paving with asphalt a portion of 14½ st. to McCarthy Improvement Co., of Davenport, for \$20,090.

**Peoria, Ill.**—The Township Board of Highway Commissioners has received bids for constructing three-fourths of a mile of hard road north from North Main st., and the same west from West Maple st. There were only two bids presented, one by R. A. Savill and one by Heckard & Sons.

Savill's bid being the lowest for the west road, \$1.41 per sq. yd. for the brick work and 40c. per cu. ft. for excavating, the contract for building the same will be let to him.

Heckard & Sons' being the lowest for the north road, \$1.42 per sq. yd. for the brick work and 37c. for excavating, they were awarded the contract for building the same.

The north road will require 7,920 sq. yds. of brick work and 900 cubic yards of excavation. The west road, 7,920 sq. yds. of brick work and 1,120 cu. ft. of excavation. The north extension will cost \$11,580.40 and the west extension \$11,615.20, the cost of both extensions being therefore \$23,195.60; work of constructing these roads will begin not later than August 1.

**Springfield, Ill.**—The Board of Local Improvements has awarded the contract for paving N. 9th st. to J. E. Bretz at \$1.33 per sq. yd.

**Clinton, Ind.**—Contract for constructing 250,000 sq. ft. cement sidewalk, bids opened July 15, has been awarded to Pierson & Kinser, of Terre Haute, at 6½c. per sq. ft. Best American Portland cement to be used, 1 to 7 mixture, 3¼ in. thick, and top ¾ in. thick mixture 1 to 2 laid on foundation of gravel and sand.—Alfred M. Danely, City Engineer.

**Crawfordsville, Ind.**—Geo. T. Miller, of Lebanon, has secured the contract for paving with brick Seminary st. for \$7,938.

**Evansville, Ind.**—The Frankfort Construction Co. has been awarded the contract for the improvement with asphalt of Delaware st. from Edgar to Garvin sts. and of Parret st. from Ewin's addition to Minor ave.; construction will begin at once.



L. Reichert has been given the contract for the improvement of brick of West Michigan st. from 9th ave. to St. Joseph ave.; the property owners want Brazil brick.

**Indianapolis, Ind.**—The Board of Public Works, July 14, opened bids as follows for paving portion of Union st.: (a) Wooden blocks; (b) brick; (c) asphalt, and (d) bitulithic; price given per sq. yd.: Hoosier Construction Co., American Central Life Bldg., (a) \$4.33, (c) \$4.02, (d) \$3.96; Manley-O'Donnell Co., (a) \$4.90, (b) \$3.71; Marion County Construction Co., 529 Fulton st., (a) \$4.33, (b) \$2.92, (c) \$3.75; J. E. Sullivan, (a) \$4.21, (b) \$3.36, (c) \$4.05; G. W. Palmer & Co., (b) \$3.18; Lackey Bros., (b) \$3.14; J. W. Abbott, (b) \$2.90; American Construction Co., (b) \$3.12; Union Asphalt Construction Co., (c) \$3.88.

**Kentland, Ind.**—Contract for constructing macadam roads in Jefferson Township has been awarded to W. F. Smith & Co., Rensselaer; Barnes & Son, Logansport; Jas. Couch, Kentland, and H. L. Simmons, Kentland; total cost, \$17,474.—E. R. Bringham, County Auditor.

**New Albany, Ind.**—The Board of Public Works has awarded the contract for improving Market st. with brick to Jefferson County Construction Co., at \$11.23 per front ft.

**Wellington, Kan.**—Council, July 13, awarded the contract for paving with asphalt portions of Washington, Harvey and Lincoln aves. to the Kaw Valley Paving Co., of Topeka, for \$98,467 for Conveto asphalt, or \$99,873 for sheet asphalt.

**Lexington, Ky.**—The Joint Improvement Committee of the General Council has decided to recommend the acceptance of the bid of the Peebles Brick Co. of Portsmouth, Ohio, for the construction with vitrified brick of North Limestone from 3d st. to Loudon ave., said brick to conform to standard test and to be laid with pitch fillers at the price of \$2.10 per square yd. It is estimated that about 800,000 brick will be required for the work.

**Lexington, Ky.**—C. C. Miller & Co., of Latonia, were the lowest bidders for the contract for paving North Limestone, their bid being \$625 lower than that of any other. Their bid was as follows: Peebles, Carlyle's, Bonnan's or Portsmouth granite brick with pitch filler, \$2.10 per sq. yd.; same brick with cement filler, \$2 per sq. yd.; same brick with asphalt filler, \$2.25 per sq. yd. The limestone curbing was put at 80c. per lin. ft.; limestone curbing reset, 20c. per lin. ft. Other bidders on the North Limestone contract in their order are as follows: Kelley Construction Co., Ironton Construction Co., G. W. Palmer, Julius Hough.

**Augusta, Me.**—Proposals for building the section of the State road of about 650 ft. through this city on Water st. have been opened; only one bid was received, that of F. A. Angier, of Manchester, N. H.; the figures were not made public.

**Lawrence, Mass.**—Bids were opened by Council July 14 for constructing 10,000 sq. yd. granolithic walks on Essex st., 16-in. excavation, 12-in. cinders, broken stone or screened gravel, 3-in. concrete base mixed, 1, 2 and 5 and 1-in. wearing surface, and the contract has been awarded to Philip Holland, of Lawrence, at \$1.30 per sq. yd. Other bids received: Warren Bros. Co., Boston, \$1.33; Simpson Bros. Co., Boston, \$1.34; Wm. Heinrich, Lawrence, \$1.34; M. O'Mahoney, Lawrence, \$1.37; Wm. P. Rae, Lawrence, \$1.40; W. A. Murtfeldt, Boston, \$1.44; Hassam Pavement Co., Worcester, \$1.49; J. Wagenbach & Son, Lawrence, \$1.57, and Jere J. Sullivan, Boston, \$1.57½.

Bids were also opened same time for 17,721 sq. yd. paving on Water st., with blocks taken from Essex st. and laid on sand foundation with cement grout joints, and the contract has been awarded to M. O'Mahoney, of Lawrence, at 57c. per sq. yd. Other bids received: Philip Holland, Lawrence, 54c.; C. I. Duggan, Boston, 55c.; Hassam Pavement Co., Worcester, 57c., and J. Wagenbach & Son, Lawrence, 57c.

**Malden, Mass.**—The Street and Water Commission has opened bids for the moving of the brick block in the square to its new location after the widening is completed. The bids included all the foundation and other work necessary to put it in as good condition as it now is. There were two bids only, although quite a number were present at the opening. Soley & Blair bid \$6,975 and John T. Cavanaugh 2d bid \$9,380. The contract was awarded to Soley & Blair.

**Hancock, Mich.**—Bids for the paving of Hancock st. were received, July 14, from five different companies. The J. J. Byers Co. and P. McDonnell of Duluth bid on tar macadam, the R. S. Blome Co. bid on granitoid, the Central Bitulithic Co. on bitulithic and the S. S. Saxton Co. on asphalt. The contract was awarded to the Central Bitulithic Co., of Manistee, who

will do the work for \$27,760.50 and the work is to be completed by October 15.

**Minneapolis, Minn.**—Bids for the improvement of three county roads have been received by the Board of County Commissioners, but the contracts were not let as the money from the bond issue is not yet available.

Hebner & Damon were the lowest bidders for grading three miles of road No. 7, in Orono, their price being \$8,425.

Turnham & Talbot were the lowest on road No. 51 in Orono, known as the Crystal Bay road, their bid being \$11,900; this road is to be graded and macadamized for a distance of three miles.

For grading and macadamizing road No. 52 in Medina for a distance of two miles, Buckley & Kennedy bid \$6,749.

**St. Paul, Minn.**—Wabasha st. will be paved with sandstone or creosote blocks, in all probability, instead of with asphalt, as ordered by the Board of Public Works in opposition to considerable sentiment of property owners against the latter material; contract for asphalt was virtually let to the Barber Asphalt Co. July 12, the only bidder, on condition that a bond of \$4,000 be furnished for ten years, instead of for four years as was offered by the company.

**Camden, N. J.**—Bids were opened, July 12, by the Stone Road Commission for building two and a quarter miles of stone road, 14 ft. wide, of either Amiesite or asphalt macadam from Coffin's Corner to Gibbsboro, 4,403 cu. yds. excav., 18,458 sq. yd. pavt., 1,560 sq. yd. cobble gutters, 500 lin. ft. underdrains, and the contract has been awarded to J. F. Shanley & Co., Arcade Bldg., Philadelphia, Pa., to \$24,061. It will be of Amiesite construction.—J. J. Albertson, County Engineer.

**Long Branch, N. J.**—The contract for building the Farmingdale-Hamilton road, better known as the "Corlies Avenue road," has been let. The successful bidder was George W. Potts, of Asbury Park, whose bid was \$10,261. Other bidders and their figures were: John L. Lecompte, Lakewood, \$12,270; John Gleason, Belmar, \$16,772.62; J. L. Butcher & Son, Farmingdale, \$14,148.20; Richard Haseman, Farmingdale, \$10,399.06.

**Perth Amboy, N. J.**—Bids for paving several streets were received by the Board of Aldermen July 19 and the contracts were awarded except in the case of High st. from Smith street to Market street, and around City Hall Park. The Hastings Paving Co. was the only bidder for laying asphalt block on State st. from Gordon st. to the river, State st. between Smith and Market sts., and the aforesaid part of High st. Their figures were: On lower State st., excavation, \$1.26 per cu. yd.; concrete, \$6.16; old curb reset, 50c. per lin. ft.; new curb, 80c., and asphalt block, \$1.68 per sq. yd. On High st. their bid was the same, with the addition of \$1.28 for concrete curbing. The upper State st. bid was the same as lower State st. on excavating, old curb and new curb, only they bid \$2.04 per sq. yd. for the pavement and but \$6 for concrete. Meagher & Smith were awarded the contract for paving Fayette st. from Madison ave. westward a short distance, with brick. Their total on Metropolitan block is \$5,145; this will be used. Their bid for Kushequa block amounted to \$4,885, and Shawmutt block, \$4,705. Martin Hansen's Metropolitan bid was \$5,541, and J. K. Jensen's, \$5,543; Jensen's Kushequa bid totals \$5,043.

**Trenton, N. J.**—Contracts have been awarded as follows: Paving South Montgomery st. with filbertine, to the Filbert Paving and Construction Co.; building a sewer on Garfield ave., to Thomas J. McGovern.

**Trenton, N. J.**—Bids were received as follows for paving Olden ave.: Gibbs & Morgan, filbertine, \$1.56 a sq. yd.; Filbert Paving and Construction Co., filbertine, \$1.50 a sq. yd.; Thomas J. McGovern, asphalt, sand and stone, \$1.35 a sq. yd.; they were referred to the Street Committee. For macadamizing Behm st. Thomas J. McGovern was the only bidder; his price was 75c. a sq. yd.

**Buffalo, N. Y.**—Mayor Adam has signed the resolution adopted by the Common Council ordering the filling in and macadamizing of the Hamburg Turnpike. The two largest contracts, for \$75,000 and \$31,400, go to F. V. E. Bardol. The third, for a macadam roadway, was awarded to the Thomas Brown Contracting Co. for \$4,830.

**Catskill, N. Y.**—Bids were opened July 14 by the Village Trustees for paving a portion of Main and Bridge sts. with brick, about 4,703 sq. yds., and the contract has been awarded to Geo. W. Holdridge of Catskill, at \$2.29 per sq. yd. Streets to be paved are now paved with stone blocks and on these latter the contractors made allowances from nothing to \$369. Mr. Holdridge made this latter allowance. Other bids received were as follows: Muldery Bros., Albany, \$2.20 per sq. yd.; Charlton

& Weston, Yonkers, \$2.39; Lampman & Place, Catskill, \$2.45; Sterritt & Eldridge, Ossining, \$2.40 and \$2.49, and Leone & Wolven, Catskill, \$2.29.—Geo. H. Warner, Engineer, Catskill.

**New York, N. Y.**—The lowest bid opened July 13 by Louis F. Haffen, Borough President, for paving with asphalt block on concrete foundation Fulton ave. from 170th to 175th sts., and setting necessary curb, Contract 10, was submitted by the Hastings Pavement Co., 25 Broad st., as follows: 13,725 sq. yds. completed asphalt block pavement, and keeping same in repair for five years from date of acceptance, \$1.84; 2,165 cu. yds. concrete, including mortar bed, \$6; 1,700 lin. ft. new curb, furnished and set in concrete, \$1.05; 5,430 lin. ft. old curb, rejoined, recut on top and reset in concrete, 35c.; total, \$41,929. The Barber Asphalt Co. bid for this work \$43,626. The Hastings Pavement Co. were also lowest bidders for asphalt on other streets in Bronx Borough, as follows: Contract 11, Elmsmere Place, \$4,324; Contract 12, E. 135th st., \$8,410; Contract 6, Courtlandt ave., etc., \$6,669; Contract 8, Hoe ave., \$14,555.

The Barber Asphalt Co., 30 Church st., submitted lowest bid July 13 for repaving with asphalt block on a concrete foundation roadway of Park ave., east, from 165th st. to E. 175th st., excepting approaches to proposed bridge at 167th st., Bronx Boro., as follows: 28,600 sq. yds. completed asphalt block pavement, and keeping same in repair for five years from date of acceptance, \$1.77; 3,610 cu. ft. concrete, including mortar bed, \$6; 300 lin. ft. new curb, furnished and set in concrete, 98c.; 400 lin. ft. old curb rejoined, recut on top and reset in concrete, 55c.; 28,590 sq. yds. old paving blocks, to be purchased and removed by contractor, 1c., the amount bid for this item will be deducted from the payment on acceptance; total, \$72,510. The Hastings Pavement Co. bid for this work \$73,624. The Barber Asphalt Co. was also lowest bidder for Contract 5, Park ave., W., and E. 175th st., \$14,792, and Contract 9, Anna Place, \$1,963.

The lowest bid opened July 13 for Contract 13, regulating, grading, setting curb, flagging, laying crosswalks, building approaches and placing fences in Sheridan ave., from E. 165th st. to E. 169th st., was submitted by C. W. Collins, 5189 Broadway, as follows: 9,000 cu. yd. earth excav., \$1; 13,700 cu. yd. rock excav., \$1; 4,100 lin. ft. new curb, furnished and set, 70c.; 16,100 sq. ft. new flag, furnished and laid, 23c.; 450 sq. ft. new bridge stone for crosswalks furnished and laid, 50c.; 100 cu. yds. dry rubble masonry in retaining walls, culverts and gutters, \$2; 100 lin. ft. vitrified stoneware pipe, 12 in. diam., 1c.; 750 lin. ft. and guard rail in place, 15c.; total, \$29,811. Totals of other bids: Voorhies, Sullivan Contracting Co., \$30,762; J. B. Malatesta, \$30,758; Wakefield Construction Co., \$35,667; C. Schneider, \$30,536; P. J. Kane Contracting Co., \$36,391.

The following are the totals of bids for Contract 14, regulating, grading, setting curb, flagging sidewalks, laying crosswalks, building approaches, and placing fences in E. 182d st., from Jerome ave. to Valentine ave.: T. J. Gillis, \$19,178; C. Schneider, \$18,268; Hoggerty Contracting Co., \$17,451; J. B. Malatesta, \$17,706; P. J. Kane Contracting Co., \$21,215, and J. C. Rodgers, Jr., \$15,629.85.

**Peekskill, N. Y.**—The Clinton Construction Co. has been awarded the contract for the permanent improvement of the Furnace Dock road, at the contract price of \$6,780.

**Troy, N. Y.**—The John H. Gleason Co. was the lowest bidder for a granite block pavement on King st. from Bridge ave. to Jacob st., and the Board of Contract and Supply received a petition that the contract be awarded that firm.

**Utica, N. Y.**—The Board of Contract and Supply, July 13, received bids for the paving of Mohawk st. from the West Shore Railroad to Pleasant st., and City st. from Green to Linden sts., and for 2,000 ft. of 2½-in. fire hose for the new Corn Hill engine house. The Barber Asphalt Paving Co. bid \$1.91 per sq. yd. for paving Mohawk st. and City st.; there were no other bidders.

**Utica, N. Y.**—The following bids were received for the construction of the first section of proposed parkway: Utica Engineering and Construction Co., \$23,245; J. E. Martin of Poughkeepsie, \$30,350.50; Barber Asphalt Paving Co., \$25,609.13; Newport Construction Co., \$24,601; John R. Baxter, Jr., \$24,976.40; Harry W. Roberts & Co., \$25,873.05; Harry W. Roberts & Co., for bituminous macadam, \$22,399.28; Warren Bros., \$30,871.55.

**Grand Forks, N. D.**—Bids were submitted July 13 for the paving of International ave. from 3d st. to 9th st., 4th st. from DeMers ave. to Cheyenne ave. and 5th st. within the same boundaries. Four competing bids were submitted, with six different kinds of pavement bid upon. On creosoted block



pavement, the General Contracting Co. has the lowest bid. On asphalt pavement, P. R. McDonnell is low. The lone bid on tar macadam of Donnellite is from Mr. McDonnell and is \$2.10 per sq. yd., being lower than creosoted blocks by about \$3.50 on the entire job. On Kettle River stone Mr. McDonnell is also low. The Bitulithic Co. bid on bitulithic pavement is considered high, being above that on creosoted blocks.

The total amount of the bids of each contractor on the various kinds of pavements on each of the three streets to be paved, follows:

International ave, 9,700 yds.—Bitulithic Paving Co., bitulithic, \$34,223.50.

General Contracting Co., creosoted blocks, 3-in., 20 lb., \$30,213.50; 3-in., 16 lb., \$29,437.50; 3½-in., 20 lb., \$31,183.50; 3½-in., 16 lb., \$30,397.50.

P. R. McDonnell, creosoted blocks, 3-in., 20 lb., \$33,669; 3-in., 16 lb., \$30,720; 3½-in., 20 lb., \$33,145; 3½-in., 16 lb., \$32,468; sheet asphalt, class A, 2-in., \$28,295; class A, 1½-in., \$27,810; class B, 2-in., \$26,840; class B, 1½-in., \$25,870; tar macadam (Donnellite), \$26,840; vitrified brick, \$31,690; Kettle River stone block, concrete base, ¾ projection, \$37,995; concrete base, ¼ projection, \$40,420; gravel base, ¾ projection, \$33,145.

Kettle River Quarries Co., creosoted blocks, 3-in., 20 lb., \$32,502; 3-in., 16 lb., \$31,550; 3½-in., 20 lb., \$34,654; 3½-in., 16 lb., \$33,490; Kettle River stone block, concrete, ¾, \$39,504; concrete, ¼, \$41,735; gravel, ¾, \$33,975.

North 4th st., 5,600 yds.—Bitulithic Co., bitulithic, \$19,368.

General Contracting Co., creosoted blocks, 3-in., 20 lb., \$17,118; 3-in., 16 lb., \$16,770; 3½-in., 20 lb., \$17,778; 3½-in., 16 lb., \$17,330.

P. R. McDonnell, creosoted blocks, 3-in., 20 lb., \$17,990; 3-in., 16 lb., \$17,598; 3½-in., 20 lb., \$18,998; 3½-in., 16 lb., \$18,606; sheet asphalt, class A, 2-in., \$16,198; 1½-in., \$15,918; class B, 2-in., \$15,358; 1½-in., \$14,798; tar macadam (Donnellite), \$15,358; vitrified brick, \$18,158; Kettle River stone, concrete, ¾, \$21,798; concrete, ¼, 20,958; gravel, ¾, \$18,958.

Kettle River Quarries Co., creosoted blocks, 3-in., 20 lb., \$18,409; 3-in., 16 lb., \$17,879; 3½-in., 20 lb., \$19,641; 3½-in., 16 lb., \$18,969; Kettle River stone, concrete, ¾, \$22,441; concrete, ¼, \$23,729; gravel, ¾, \$19,249.

North 5th st., 5,500 yds.—Bitulithic Paving Co., bitulithic, \$19,606.75.

General Contracting Co., creosoted blocks, 3-in., 20 lb., \$16,817.75; 3-in., 16 lb., \$16,377.75; 3½-in., 20 lb., \$17,367.75; 3½-in., 16 lb., \$16,927.75.

P. R. McDonnell, creosoted blocks, 3-in., 20 lb., \$18,183; 3-in., 16 lb., \$17,798; 3½-in., 20 lb., \$19,173; 3½-in., 16 lb., \$18,788; sheet asphalt, class A, 2-in., \$16,423; 1½-in., \$16,148; class B, 2-in., \$15,598; 1½-in., \$15,048; tar macadam (Donnellite), \$15,598; vitrified brick, \$18,348; Kettle River stone, concrete, ¾, \$21,923; ¼-in., \$23,298; gravel, ¾-in., \$19,173.

Kettle River Quarries Co., creosoted blocks, 3-in., 20 lb., \$18,472; 3-in., 16 lb., \$17,922; 3½-in., 20 lb., \$19,682; 3½-in., 16 lb., \$19,022; Kettle River stone, concrete, ¾, \$22,432; concrete, ¼, \$23,697; gravel, ¾-in., \$19,297.

The lowest bidders and their bid on the entire job of paving follow: Bitulithic Paving Co., bitulithic, \$73,198.25; General Contracting Co., creosoted blocks, 3-in., 20 lb., \$64,148.75; 3-in., 16 lb., \$62,585.25; 3½-in., 20 lb., \$66,329.25; 3½-in., 16 lb., \$65,055.25. P. R. McDonnell, tar macadam (Donnellite), \$57,796; asphalt, class A, 2-in., \$60,916; 1½-in., \$59,876; asphalt, class B, 2-in., \$57,796; 1½-in., \$55,716; vitrified brick, \$68,196; Kettle River stone, concrete, ¾, \$84,676; gravel, ¾, \$71,316.

The figures on the paving this year as compared with the bids received a year ago are as follows, the figures quoted being on the sq. yd. of paving, exclusive of extras:

	1909	1908
Creosoted, 3-in., 20 lb.	\$2.51	\$2.79
Creosoted, 3-in., 16 lb.	2.43	2.72
Creosoted, 3½-in., 20 lb.	2.61	3.02
Creosoted, 3½-in., 16 lb.	2.53	2.92
Tar macadam (Donnellite)	2.10	2.25
Vitrified brick	2.60	2.75

The bids on the extras, such as manholes, monuments, etc., are as follows on the entire job, the figures here quoted being included in the total cost of paving as given before in this article:

General Contracting Co.	\$12,141.25
Bitulithic Co.	18,078.25
P. R. McDonnell	14,116.00
Kettle River Quarries Co.	14,277.00

**Akron, O.**—The Board of Public Service has awarded the contract for paving Broadway with Akron block to Wildes & Davidson for \$17,068.

**Ashtabula, O.**—Contract for paving Oak st. with brick has been awarded to Downs & Campbell, of Canton, for \$23,434.—A. J. Richardson, Clerk Board of Public Service.

**Bucyrus, O.**—The lowest bid on the paving of Gallon st. was considerably below

the Engineer's estimate of \$14,250, as shown by the figures in the totals on two bids and on one kind of block for the third bid. and showed that Mr. Faple's bid for Townsend block was \$2,500 under the estimate; the bid with Wassall block specified was almost exactly \$2,000 under the estimate; the Wassall block is the block chosen for East, Mary and Poplar sts. Paule's bid for Townsend block was the lowest offered, the highest figures submitted by him being for Bessemer block, for which the total was \$12,752.50. Raymond's bid did not fall below \$13,100 with any block proposed. Uncapher, Scott & Co.'s bid for Wassall block was \$12,607.50.

**Cincinnati, O.**—N. Ruebel has secured the contract for paving with granite a portion of Broadwell ave., at \$7,283.

The County Commissioners have awarded the contract for improving Hohlenkamp road to John E. Shankling, for \$6,972.

**Dayton, O.**—City Engineer Cellarius has concluded the tabulation of bids received on grading and graveling jobs, with the exception of the improvement of Rubicon st.; the low bidders on the other three streets are: Harper, Fred Gale, \$108; Stoddard ave., David Onkst, \$1,760, and Monument ave., William H. Boyd, \$777.40.

**Lima, O.**—W. N. Andrews & Co. of Hamilton have been awarded contracts for the paving of Market and Spring sts. with asphalt; improvement involves \$100,050.

The bids for the West Market st. paving, so far as given out by the Engineer, are as follows: Andrews & Co., \$68,640; J. F. Hill & Co., \$70,557; Saxton & Co., \$78,978; Maire Bros., \$70,685; the bids on asphalt for West Spring were as follows: Hill & Co., Gilsonite, \$30,334; McHugh, brick, \$29,553.75; Andrews & Co., Bermudez, \$32,322.15, and Asphalt block, \$36,135.

**Lisbon, O.**—William McLane and John R. Armstrong, Lisbon contractors, under the firm name of McLane & Armstrong have been awarded the contract for grading and paving 1½ miles of country road between East Palestine and Unity in Unity Township. Their bid was \$18,000, which was the lowest responsible bid offered for the work, as considered by County Commissioners Carnes, Boyd and McCamon and State Highway Commissioner James C. Wonders of Columbus, who awarded the contract. The firm submitted two bids, one of which was for \$17,480 and called for a foundation of gravel. The higher bid, which was accepted, included Minerva block with concrete foundations. The other bids which were considered were as follows: J. C. Devine, Alliance, \$18,248; George B. Patterson Coal and Supply Co., Wellsville, \$20,000; William N. Wright, Lisbon, \$17,900.

**Mansfield, O.**—Carroll & Gruber, Caledonia, have secured contract for paving Olivesburg road, State Highway C, for \$12,990.

**Marietta, O.**—The County Commissioners, July 14, opened bids as follows for paving with brick the Hildreth road, a distance of about one mile: W. C. Peters, \$16,500; Putnam & Price, \$15,899; L. T. Cislser, \$15,490, awarded contract, and T. B. Townsend Brick and Contracting Co., of Zanesville, \$15,610.

**Massillon, O.**—George W. Lemmon, a contractor of Wheeling, W. Va., has been awarded the contract for paving ten streets in this city. The contract price is 99c. a sq. yd., and Massillon brick will be used throughout.

**Piqua, O.**—J. W. Wroe, of Dayton, has secured contract for paving Caldwell st. at 90c. sq. yd. for treated macadam.—W. B. Mitchell, Clerk Board of Public Service.

**Muskogee, Okla.**—The following contracts were let by City Council to Cleveland Trinidad Co., approximately 2,540 sq. yds. of sheet asphalt pavement at \$2.03 per sq. yd.; and to the Davies Contracting Co. for 2,700 cu. yds. class "A" and 2,700 cu. yds. class "B" excav. at 35c. and 90c. respectively per cu. yd., and for 510 sq. yds. brick paving at \$1.94 per sq. yd.—L. B. Kinney, City Engineer.

**Portland, Ore.**—Contracts for paving have been awarded as follows: A portion of 24th st., to Warren Construction Co., Oregonian Bldg., for \$22,459, and Alberta st. to J. L. O'Donnell, for \$11,569.

**Chester, Pa.**—Several contracts have been awarded by Select and Common Councils, the most important being those for the paving of 10th st. and 11th st. from Edgmont ave. to Morton ave., the latter two contracts after much heated discussion and amendments being awarded to the Barber Asphalt Paving Co. at their bids for each street, which in each case was as follows: The bid on the contractors' specifications, \$1.94 per sq. yd., which was less than 31c. under the company's bid as per city's specifications, being accepted. Sheet asphaltum, five-year guarantee, \$1.94 per sq. yd. The bids in full were as follows: Herman Dickerson, Grafton block, \$2.23 per sq. yd.

Barber Asphalt Company, sheet asphaltum, no guarantee, \$1.94 per sq. yd.; sheet

asphaltum, guarantee, \$1.94 sq. yd.; these bids submitted according to contractors' specifications; sheet asphaltum bids submitted according to city's specifications, under no guarantee, \$2.25 per sq. yd.; under five-year guarantee, \$2.25 per sq. yd.

J. Hanna Sons, Grafton block, \$2.20 per sq. yd.; Mack shale, \$2.18 per sq. yd.

Bitulithic Co., New York, bitulithic pavement, either bituminous or concrete base, \$2.15 per sq. yd.

**Philadelphia, Pa.**—N. C. Hunter, of Washington, Pa., has secured the contract for constructing three miles of the Centerville Church Hill road for \$33,711.

**Williamsport, Pa.**—The asphalt repaving and repairing contract has been let to the Filbert Paving and Construction Co., of Philadelphia, at \$1.05 per sq. yd. for Bermudez asphalt and 45c. per sq. yd. for repairing bad concrete.

**Nashville, Tenn.**—The Board of Public Works, July 15, opened bids for the construction of concrete sidewalks and curbing on 8th ave., north, between Church st. and Broadway. The awarding of the contracts will mark the beginning of the final steps in a very considerable improvement for the city—the widening of 8th ave. Wm. Leftwich was the lowest bidder for the sidewalk construction, Agather & Robinson for the curbing and sills, and J. T. Allen for replacing the cut stone curbing in front of the High School property.

The bids per sq. yd. for the sidewalk construction were as follows:

J. T. Southgate, \$1.63; Nashville Roofing and Paving Co., \$1.60; Oman Stone Co., \$1.82; Agathen & Robinson, \$1.59; John Williams, \$1.65; S. Rogers & Son, \$1.62; Nashville Concrete Co., \$1.61; G. Maddox, \$1.62½; William Leftwich, \$1.26½; Conniff & Stone, \$1.71; Uncle Hiram Roofing Co., \$1.70; Taylor Bros., \$1.65; Hoover, \$1.73; Mims, Sneed & Co., \$1.62; Southern Roofing and Paving Co., \$1.65.

Following were the bids, each per lin. ft., submitted for the laying of the uniform curbing:

John T. Southgate, 98c. and 45c.; Nashville Roofing and Paving Co., 95c. and 35c.; Oman Stone Co., \$1 and 50c.; Agathen & Robinson, 94c. and 34c.; J. Williams, 98c. and 38c.; S. Rogers & Son, 95c. and 45c.; Nashville Concrete Co., 95c. and 40c.; G. Maddox, 97½c. and 35c.; William Leftwich, 96c. and 38c.; Conniff & Stone, 97½c. and 40c.; Uncle Hiram Roofing Co., 99c. and 37½c.; Hoover, \$1; Mims, Sneed & Co., 97½c. and 35c.; Southern Roofing and Paving Co., \$1 and 40c.; Taylor Bros., 98½c. and 36½c.

The bids for removing and replacing the cut stone coping in front of the High School property were as follows: Oman Stone Co., \$125; J. T. Allen, \$110; Foster & Herbert, \$134.

**Houston, Tex.**—A contract has been awarded to the Houston Transportation Co. for shell for the streets that are to be improved. The Penn City Land Co. will construct about 85 miles of shell streets in the town and lay nearly twice that many miles of concrete sidewalks.

**Seattle, Wash.**—The lowest bid opened by the Board of Public Works for paving Federal ave. with asphalt, was that of the Independent Asphalt Co., at \$12,770, with concrete curb, and \$13,002 with granite curb. The American Contracting Co. submitted lowest bid for concrete walks on Keystone Place at \$14,553, and on North 83d st., \$4,027.

**Spokane, Wash.**—Contracts have been let as follows: Grade, curb, park and sidewalk Gordon ave., Crestline st. to Cook st., C. M. Payne, \$5,490; engineer's estimate \$6,300; grade, curb and park Montgomery ave., Belt st. to Northwest boulevard, C. M. Payne, \$6,225; engineer's estimate, \$7,070. Grade, curb and park 12th ave., Rosedale boulevard to Curry addition, Foster & Hindle, \$7,050; engineer's estimate, \$6,500.

**Vancouver, Wash.**—Bids were received from Rector & Daily, of Vancouver, and the Cascade Contract Co. for the improvement of the following streets with gravel or crushed rock, and for concrete curbs and concrete sidewalks or wooden curbs and walks, as are called for in the specifications: 14th from Franklin to Hidden's brickyard; 14th from Kauffman to Railroad ave.; Park from 13th to 17th; Esther ave. from 13th to 18th; 4th from Park to Estier; Harney from 13th to 18th; 15th from Railroad ave. to the Hidden property.

**Milwaukee, Wis.**—Contracts have been let by the Board of Public Works as follows: Brick paving of 27th st. from St. Paul ave. to the 27th st. viaduct, Badger Construction Co., \$1.94 per sq. yd.; brick paving of Fond du Lac ave. from Wright st. to 27th st., Robert M. McGucken, \$1.89 per sq. yd.; water pipes, 2,350 tons at \$24.40 per ton, United States Cast Iron Pipe and Foundry Co.

## SEWERAGE

**Mobile, Ala.**—The Board of Aldermen has received a report from Committee with reference to the laying of sewers in Oakdale recommending that the City Engineer be instructed to figure on the approximate cost of the work necessary to install same.

**Phoenix, Ariz.**—Plans have been prepared by Olmstead & Gillelen, Los Angeles, Cal., for the construction of a \$300,000 sewer system.

**Allendale, Cal.**—Redwood Road Sanitary District has voted \$36,000 bonds for construction of a sanitary sewer.

**Colusa, Cal.**—City Engineer J. W. Kaerth has submitted a report to the Trustees placing an estimate of \$98,000 as the probable cost of a sewer system and a water plant.

**Dimond, Cal.**—Upper Fruitdale Sanitary District has voted \$60,000 bonds; sewers will be installed at once.

**East Fruitdale, Cal.**—Citizens have voted \$54,000 bonds for construction of a sewer in the East Fruitdale Sanitary District.

**Elmhurst, Cal.**—Citizens have voted \$75,000 bonds for sewer purposes.

**North Pasadena, Cal.**—The County Supervisors have decided to form two new storm districts in Pasadena and both of them will be in North Pasadena, which will keep the sections well protected from storm water which causes considerable damage in the winter.

**Roseville, Cal.**—City Engineer U. S. Marshall has completed the survey for the temporary sewer system to relieve the business districts by connecting with the railroad sewer until the town can get its own system; plans and estimated costs will be brought before the city authorities for action very soon.

**San Francisco, Cal.**—The Board of Public Works has asked the Supervisors for \$100,000 for sewers of the North Beach intercepting system and \$180,000 for Section "A" of the Division st. sewer.

**Hartford, Conn.**—The East Hartford Fire District has authorized the construction of 1,875 lin. ft. of 4-in. pipe sewer in Roberts st.—C. Henry Olmstead, Engineer.

**Torrington, Conn.**—The Borough Board has received a petition for a sewer on East Elm st. from Brightwood ave. to East Main st.

**Waterbury, Conn.**—Estabrook & Co. of Boston, with a bid of \$191,007, purchased the \$190,000 worth of sewage disposal bonds.

**St. Augustine, Fla.**—Citizens are agitating a complete sewerage system; bonds will be issued; engineer not yet selected.—Eugene Masters, Mayor.

**Adairsville, Ga.**—City is considering construction of sewer system.

**Macon, Ga.**—Citizens will vote November 3 on \$100,000 bonds for sewer construction.

**Gary, Ind.**—Plans have been prepared by City Engineer A. P. Melton for district sewer No. 2.

**Greencastle, Ind.**—The Riggs & Sherman Co., of Toledo, O., has prepared plans for the proposed sewerage system.

**Hammond, Ind.**—The Board of Public Works has instructed the City Engineer to prepare plans for a sewer in Sheffield ave. from Gostlin to Ruth st.; cost \$3,500.

**Bloomfield, Ia.**—Council is receiving bids for the construction of a septic tank.—J. M. Krewson, City Clerk.

**Lake City, Ia.**—Plans have been prepared by O. Anderson, of Lake City, for 2,600 ft. of 8 to 18-in. sewers.

**Topeka, Kan.**—The Board of County Commissioners has decided to expend \$25,000 in oiling roads.

**Mt. Sterling, Ky.**—Plans and specifications for a sewer system have been put before the Council and the following committee was appointed to investigate the plans and prepare an ordinance to be submitted to a vote of the people for its passage: W. C. Hamilton, Mayor C. W. Harris, G. W. Sullivan, W. A. Samuels, William Botts, R. G. Kem, W. S. Lloyd, W. R. Thompson and C. H. Bryan.

**Nicholasville, Ky.**—City is considering a \$60,000 bond issue for construction of sewer system and water works.

**Lake Charles, La.**—Citizens will vote on bonds for installation of a sewerage system.

**Bar Harbor, Me.**—Town will authorize and direct the Selectmen to lay out a public sewer from the Dolliver property on Hancock st. to the sea, connecting with, and so far as practicable following, the old sewer on the Musgrave property and to report such laying out, with an estimate of the cost, at the next annual town meeting.

**Lenox, Mass.**—Consulting Engineer Wm. S. Johnson, of Boston, has recommended the expenditure of \$30,000; this includes the relaying of about two miles of the west side system with cast-iron pipe, a settling plant having a capacity of 20,000 gallons, five acres of filter beds properly underdrained and sludge beds of a quarter of an acre.

**Malden, Mass.**—The Board of Aldermen has appropriated \$30,000 to extend the sewer system into the Linden district.

**Methuen, Mass.**—Town will lay 2,600 ft. of sewer on Ashland ave. and Lowell st.; cost \$2,000; also 400 ft. on Oakland ave.; cost \$400.

**Wakefield, Mass.**—Upon the petition of the proprietors of the Harvard knitting mill, the town has voted to construct a sewer on Lake st. at a cost of \$1,300; object is to take care of 50,000 gallons of water per day necessary to run the mills' bleaching plant, which will soon be installed.

**Flint, Mich.**—The City Engineer is preparing plans and specifications for the construction of a sewer in 9th st. from Harrison st. to Lapeer st.

**Trenton, Mich.**—Plans have been completed for a sewer system; cost about \$40,000.—Mason L. Brown, Chamber of Commerce Bldg., Detroit, Engineer.

**Duluth, Minn.**—The Board of Public Works is considering construction of a sanitary sewer on Garfield st.—R. Murchison, Clerk.

**Clinton, Mo.**—Bids will soon be received for 1,000 ft. of 8-in. pipe sewer on 3d st.—R. Bellise, City Clerk.

**Hamilton, Mont.**—H. S. Ward will prepare plans for a sewer twenty-one blocks in length.

**Missoula, Mont.**—C. W. Swearingen, Great Falls, will prepare a map of the present sewer system and will make recommendations for the repair of same.

**Hastings, Neb.**—Council has ordered the readvertisement for bids for constructing sewer in District No. 44.

**Beverly, N. J.**—Clyde Potts has been selected as engineer to prepare plans for proposed sewerage system.

**Bloomfield, N. J.**—Town Council has decided to install a storm drain on State st.; also a storm sewer in the Silver Lake section.

**Passaic, N. J.**—This city will raise by borrowing on note the additional \$5,000 which the municipality will pay toward the cost of preliminary work on the trunk sewer project.

**Trenton, N. J.**—The city's special Sewage Disposal Commission will recommend the adoption of the sprinkling filter system, such as used in Reading, Pa.; estimated cost between \$500,000 and \$600,000.

**Trenton, N. J.**—Council is considering the sewerage of Stuyvesant ave. from Adams st. through Prospect to East Stuyvesant and through Rutherford to Marion st.

**Trenton, N. J.**—Complaints have been received by the Sanitary Committee of Council concerning the overflow of surface water into cellars in various parts of the city, and it was decided to remedy the trouble by the construction of drains; that section in the vicinity of Perry and Montgomery sts., where conditions are very bad, will probably be the first to receive attention.

**Olean, N. Y.**—Citizens have voted \$119,000 bonds for construction of sewers, water works and other improvements.

**Cincinnati, O.**—The Board of Public Service has decided to proceed with the plan of laying the trunk line of sewers in Westwood.

**Dayton, O.**—Council has passed an ordinance appropriating \$4,000 for sewer in Hartford st.; also ordering a sewer in St. Nicholas ave. from Wyoming to Lorain ave.

**Hamilton, O.**—City Civil Engineer L. A. Dillon has submitted plans, specifications and estimates for main and sanitary sewers in the 3d Ward, which constituted the largest single sanitary proposition presented since the original construction of sewers and which embrace about 4 miles of sewerage.

**Wapakoneta, O.**—Bids will be received by the Village Clerk August 2 for \$9,000 worth of sewer bonds.

**West Lafayette, O.**—The State Board of Health has approved plans for proposed storm sewers.

**Chandler, Okla.**—Council has sold \$25,000 sewer bond issue to the Oklahoma Bond and Trust Company, of Chandler, F. B. Hoyt, of Chandler, negotiating the deal. The bonds sold at par and accrued interest.

**Chickasha, Okla.**—City Engineer E. E. Colby has prepared plans for storm sewers; cost \$57,575; also for four miles of sanitary sewers, \$22,250; Council has adopted plans and ordinance is being drawn to submit a proposition to vote on same.

**Oklahoma City, Okla.**—City Engineer W. C. Burke has recommended the construction of storm sewers; cost \$181,405.

**Blakely, Pa.**—Bids will be received August 23, 7:30 p. m., for construction of 45,000 lin. ft. of sewer; sizes 8, 10 and 12-in.—A. B. Dunning, Mears Bldg., Scranton, Engineer; Edw. Evans, Jr., Chairman Sewer Committee.

**Chester, Pa.**—The Finance Committee is considering loan bill providing for the bor-

rowing of \$500,000 for making sewer, street and other improvements.

**Homestead, Pa.**—Borough Council will soon take up the sewage problem.

**Philadelphia, Pa.**—Citizens are urging the construction of a sewer along the Wissahickon Creek, from Walnut lane bridge to the city limit.

**Uniontown, Pa.**—Bids will be received for constructing an 8-in. sewer leading from main sewer in the Fair Ground to rear of the school building.—Garrette Emme, Secretary North Union School Board, Box 225.

**Warren, Pa.**—City will ask the State Board of Health for permits to lay about 28,900 ft. of sewer mains.

**Wilkes-Barre, Pa.**—Plans have been prepared for a sewer over the old canal route to the river; cost about \$100,000.

**Belton, Tex.**—Citizens are urging the construction of a \$10,000 sanitary sewer system.

**Canyon City, Tex.**—Citizens have voted \$25,000 bonds for construction of sewer system.

**Dallas, Tex.**—Advertisement has been ordered for bids on the construction of the following 6-in. sanitary sewer lines: Between Throckmorton and Knight, Routh and Cedar Springs, 1,350 ft.; cost not to exceed \$488.50; on Shelby, between Fairmount and Dickason, 1,550 ft.; cost \$554.50; on block 1,341, between Throckmorton and Reagan, Fairmount and Dickason, 1,570 ft., \$565.50; between Oak Lawn and Wellborn, Fairmount and Congress, 1,050 ft., \$385.50; in block 868 of Hughes, Aiken & Hughes addition, 167; between Hall and Bryan in an alley, 300 ft., \$148; north of Beckley ave., in lots 1 to 4 and 6, block 20, of Miller & Stemmons addition, 428 ft., \$192.60.

**Quanah, Tex.**—Citizens will vote on \$80,000 bonds for additions to water works and sewerage system.

**Seymour, Tex.**—City has sold \$35,000 sewerage and water works bonds to J. H. Caussey & Co., at \$1.02½.

**Alexandria, Va.**—Council has appropriated \$400 for the construction of a pipe sewer on King st. between Henry and Fayette sts.

**Lynchburg, Va.**—City will expend about \$30,000 for sewer construction.

**Mt. Vernon, Wash.**—Council will soon award a contract for the installation of a sewer system; cost \$20,000.

**Seattle, Wash.**—Ordinances have been passed by the Council providing for the establishment of the Connecticut st. and King st. trunk sewer districts.

**Spokane, Wash.**—Plans have been completed for the construction of sewers as follows: On Nora ave., 4th ave., Sherman st., 12th ave., 8th ave., 11th ave.

**Chippewa Falls, Wis.**—City is considering construction of sanitary sewers in a number of streets.—John Wiley, City Clerk.

**Madison, Wis.**—City will issue \$65,000 bonds for the construction of storm water sewers.—O. S. Norsman, City Clerk.

**Barrie, Ont., Can.**—Bids will soon be received for the construction of the proposed sewer system; cost \$30,000.—C. H. Mitchell, Traders' Bank Bldg., Toronto, Engineer.

## BIDS RECEIVED AND CONTRACTS AWARDED

**San Bernardino, Cal.**—The County Supervisors have opened bids for the construction of 1,800 ft. of sewer, manholes and flush tanks for the county hospital, which is to be constructed under the direction of City Engineer Lothrop. There were five bidders and the contract went to the George M. Cooley Co., which firm made the lowest offer. The bids were as follows:

George M. Cooley Co.: For the sewer, 42½c. per ft.; manholes, \$39; flush tanks, \$58.50.

M. L. Harris: Sewer, 47c.; manholes, \$41; flush tanks, \$96.

Ross & Merry—Sewer, 51c.; manholes, \$41; flush tanks, \$103.50.

San Bernardino Hardware Co.: Sewer, 50c.; manholes, \$50; flush tanks, \$110.50.

E. R. Werdin: Sewer, 52c.; manholes, \$40; flush tanks, \$60.

**San Francisco, Cal.**—The Board of Public Works has awarded contract for sewer construction in 5th st., between Howard and Market sts., to the Healy-Tibbitts Construction Co., 268 Market st., San Francisco, at \$28,359.

G. W. McGlin & Co. were awarded contract for the construction of sewers in Greenwich and Octavia sts., at \$7,710.—Marsden Manson, City Engineer.

**Moultrie, Ga.**—Contract for the sewer pipe for the proposed sewer system has been awarded to H. Stevens Sons Co., of Macon.—N. S. Jaudon & Goss, Atlanta, Consulting Engineers.

**Lexington, Ky.**—Bids have been received for the sewers on West 4th st. and on Park ave. Thomas O'Day secured the contract for the West 4th st. sewers, while Joe Melvin & Co., after sharp bidding with







**Williston, N. D.**—The largest contract ever let in the State of North Dakota has recently been let to Chas. H. Porritt, of Fargo. The consideration attached to the contract is somewhere about \$42,000.

Harvey, N. D., has also given Mr. Porritt another contract for a big sewer system to be constructed there; this system is to cost \$10,000.

**Dayton, O.**—George Hecker has been awarded the contract for the storm water sewer construction on Wyoming from Phillips to Creighton aves., at his bid of \$1,092.60.

**Dayton, O.**—The contract for the construction of a storm water sewer on Wayne from Wilmington to Highland aves. has been awarded to William H. Boyd by the Servers, at his bid of \$1,155.55.

**Pittston, Pa.**—McConville & Fitzpatrick have secured contract for a sewer in Market st., for \$2,200.

**Titusville, Pa.**—Burns Bros. of New Castle have secured contract for the construction of a sewer in Brown, East Elm and Chestnut streets, about 2,750 ft. 36-in. tile, at \$8,728.

**West Hazleton, Pa.**—Bids were opened by Council July 16 for the construction of the proposed new sewer system in Green Ridge. There were five bidders, but owing to the mass of figures presented the awarding of the contract was postponed in order to give the members an opportunity to tabulate the bids. The bidders were: George H. Meinholz, of Reading; Ludwig Kramer, of Hazleton; Hillpot & Cox, of Red Bank, N. J.; T. H. Williams, of West Hazleton, and the West Hazleton Contracting Co., Julius Schneider, Manager.

**Pierre, S. D.**—McMillen & Curran, of St. Pierre, have secured contract for constructing sewers, for \$11,060.

**Nashville, Tenn.**—The Board of Public Works has awarded the following contracts:

To J. T. Allen, to lay a sewer in Murrell st., the bids being as follows: Quinn & Ellis, \$532.80; Curtis & LeSueur, \$449; John Broderick, \$484; J. T. Allen, \$238.

To W. A. Roache, to construct a sewer in Oldham st. and alley 314½, the bids being as follows: Quinn & Ellis, \$261.30; Curtis & LeSueur, \$263.80; W. A. Roache, \$217.55; Sullivan & Hagerty, \$244.38; J. T. Allen, \$373.50.

To W. A. Roache, to lay a sewer in Russell st., 11th st. and alley 293½, the bids being as follows: Quinn & Ellis, \$398.15; Curtis & LeSueur, \$474.10; W. A. Roache, \$372.25; Sullivan & Hagerty, \$438; J. T. Allen, \$405.50.

**Dallas, Tex.**—W. E. Underwood of Dallas is lowest bidder at \$31,765.46 for construction of sanitary sewer through Fair Grounds and South Dallas to Trinity River. —J. M. Preston, City Engineer.

**Dallas, Tex.**—Bids have been opened for the construction of the 8 to 12-in. sanitary sewer to and through the Fair Grounds. Bidders were: Ockander Bros., C. W. Olcott, McCord Construction Co., George S. Vivian and the Dallas Home Improvement Co. The bids are to be tabulated.

**Ft. Worth, Tex.**—Contract for constructing seventeen miles of sewers, on the north side, has been awarded to the General Supply and Construction Co., cost, \$100,000.

**Tacoma, Wash.**—When the bids for the construction of a storm water sewer on Park ave. and other streets in the South End were opened by Commissioner of Public Works H. J. McGregor, the Wells Construction Co. was found to be the lowest bidder. Five bids were received. The Wells Construction Co. bid \$16,010. Other bids were as follows: K. S. Davis, \$16,259; Gallucci & De Kose, \$18,400; M. J. Hickey, \$16,687; Antonio Fignanelle, \$16,909. No award was made; improvement was authorized by a special election held in April and the funds are available through the sale of \$75,000 worth of bonds.

## WATER SUPPLY

**Texarkana, Ark.**—Mayor A. B. De Loach has recommended an election on bonds for the construction of water works.

**Benson, Ariz.**—The Benson Water Co. will extend its water service and also establish an electric lighting plant.—Frank Treat, Manager.

**Colusa, Cal.**—City Engineer J. W. Kaerth has estimated probable cost of a water plant and a sewer system at \$98,000; cost of water plant, \$60,000.

**Montrose, Col.**—City is considering the installation of an Underwriters' standard centrifugal fire pump of 1,000 gallon to 1,500 gallon capacity as a reserve and additional source for the general water supply.

**Farmington, Conn.**—The Farmington Water Co. has decided to lay a number of 10 and 6-in. mains, raise the dam and build two filter beds.

**Manchester, Conn.**—City has voted \$50,000 for a municipal water service.

**Kissimmee, Fla.**—Citizens will vote in August on bonds for construction of water works.

**Bellevue, Ida.**—Bids will be received about August 10 for water works improvements; cost \$10,000.—A. H. Wright, of Richfield, Engineer; Francis Jones, City Clerk.

**Bloomington, Ill.**—Bids are about to be received for water works improvements; cost about \$60,000.—Harry E. Rhoads, City Clerk.

**Chester, Ill.**—City has decided to extend its water works system.

**Rock Island, Ill.**—The Water Works and Finance Committee will recommend that the city build a 6,000,000-gallon mechanical filter on the hill site at the reservoir; recommendation will further ask the Council to instruct for bids so that the project can be brought to a head at once.

**Hammond, Ind.**—The Board of Public Works has approved plans and specifications for the 3¼-in. lead water pipe connections in Waltham st. between Hohman st. and C. I. & S. R. Railroad.

**Covington, Ky.**—City will lay water mains in 19th st. from Denver to Eastern ave.; in Maryland ave. from 18th st. to Delmar ave.; in Delmar ave. from Oakland to Glenway, and in Oakland between 20th st. and Glenway ave.

**Nicholasville, Ky.**—City is considering a \$60,000 bond issue for construction of water works and sewer system.

**Albion Springs, La.**—City is considering construction of \$14,000 water works.

**Lisbon Falls, Me.**—The installation of an \$80,000 water works system is being considered.

**Frederick, Md.**—The Board of Aldermen has approved the laying of a 20-in. main from the reservoir to Chapel alley, on East 7th st., and the continuing of the 8-in. main from Chapel alley and 2d st.

**Lynn, Mass.**—The Board of Aldermen is considering an ordinance appropriating \$3,500 for the preparation of plans and estimates for the introduction of the American system of mechanical filtration.

**Newtonville, Mass.**—Bids will be received for laying about four miles of cast-iron water pipes and constructing a small concrete dam in Northern Vermont.—Percy M. Blake is interested.

**Pittsfield, Mass.**—City will sink an artesian well in order to increase water supply.

**Alma, Mich.**—Estimate has been prepared by City Engineer E. M. Wood for an iron water main for the city.

**Hettinger, Mich.**—City is planning to install a water works system.

**Holland, Mich.**—John W. Alvord, New York, has been selected to investigate feasibility of a new water supply.

**Shepherd, Mich.**—Citizens have voted \$7,000 additional for water works and electric light.

**Biwabik, Minn.**—Plans will be prepared by Engineer E. P. Burch, Minneapolis, for a 125,000-gallon water tank.

**Colquet, Minn.**—The Street Commissioner will prepare an estimate of the cost of water mains which have been petitioned for.

**Foley, Minn.**—Village is considering the selection of a water works system; cost about \$15,000.

**Hastings, Minn.**—City is taking bids for a water works and sewerage system; cost \$10,000.—J. H. Twitchell, City Clerk.

**Batesville, Miss.**—Citizens have voted to construct water works.

**Jackson, Miss.**—The Water Works Commission is formulating plans for filtration of water supply.—W. M. Anderson, Chairman.

**Holden, Mo.**—Citizens are considering a \$40,000 bond issue for a new water works plant.

**Warrenton, Mo.**—City is planning to install water and sewer systems.—Fuller-Coult Co., Chemical Bldg., St. Louis, Mo., Engineers.

**Great Falls, Mont.**—The Water Committee has recommended the extensions of water mains on 36th st., 3d ave., 27th st. and 1st ave. S.

**Belden, Neb.**—Village Council has selected Arnold C. Koenig & Co., 616 Bee Bldg., Omaha, to prepare plans and specifications and superintend the construction of a complete system of water works.—F. B. Barber, Village Clerk.

**Collingswood, N. J.**—Borough Council has adopted a resolution recommending the establishment of a municipal water plant; residents have effected a permanent organization to be known as the Citizens' League to secure a better supply of water.—Walter L. Tushingham, President.

**Haledon, N. J.**—Citizens will vote, Aug. 24, on \$10,000 bonds for the extension of water mains on Van Dyck, Buschmann, Hobart and Morrissee aves. and Willie St.—W. J. Turner, Borough Clerk.

**Attica, N. Y.**—Hart & Co., of Pavilion, have submitted a proposition for piping natural gas from that territory to this village; company claims to be able to furnish

an unlimited supply at a price much lower than that now prevailing here; proposition will likely be accepted.

**Auburn, N. Y.**—The Water Commission has adopted resolutions to build a filtration plant at the corner of Swift st. and Throop ave., this property being recently acquired by the Commissioners; Hazen & Whipple, of New York, will be employed in preparing plans and specifications for such a plant; cost \$170,000; annual cost of operation, \$3,500.

**Buffalo, N. Y.**—Alderman Kennedy has introduced a resolution calling for an investigation into the feasibility and cost of a municipal pipe-making plant.

**Irondequoit, N. Y.**—Town Board will establish a water district for Summerville and Windsor Beach, and has appointed Charles Salmon, Joseph P. Summerhays and W. H. Pringle as Water Commissioners; water works system will be constructed; cost \$18,000.

**Ithaca, N. Y.**—City is having plans and specifications prepared for improving the dam and pipe line.

**Mineola, L. I., N. Y.**—The Nassau County Supervisors have given permission to the Department of Water Supply, Gas and Electricity of the City of New York to drive five test wells in the county of Nassau at the following points: One along Jerusalem ave. at the East Meadow stream, one on Front st. near Barnum ave., one on Jerusalem ave. at the head of Hogshead road, one on Bethpage road west of the Wantagh road, and one on Bethpage road near Bethpage Junction.

**Niagara Falls, N. Y.**—The Water Commission has rejected all bids received for laying the intake pipe and constructing the intake pier for the new water works, all being in excess of the estimate, \$53,400.

**Olean, N. Y.**—Citizens have voted \$119,000 bonds for construction of water works, sewers, and other improvements.

**Seneca Falls, N. Y.**—The Board of Water Commissioners will advertise for bids in about two weeks for the construction of part of a municipal water works system; Engineers Morrison & Farrington, of Syracuse, have inspected the proposed site of a pumping station, near Canoga Point and are now engaged on plans and specifications.

**Syracuse, N. Y.**—The Board of Contract and Supply will soon ask for new bids on the construction of the proposed conduit to carry Skaneateles water across southeasterly section of city; contractors previously receiving the contract have given up the work.—H. Callen, City Engineer.

**West Carthage, N. Y.**—All bids for laying 3½ miles of 8 and 10-in. cast-iron water pipe and the construction of head works and standpipe foundation included in the proposed extension of the water works have been returned to bidders unopened and the bids will be readvertised.—W. A. Porter, Village President.

**High Point, N. C.**—City has selected Gilbert C. White, Durham, to survey watershed in order to secure pure water supply.

**Apple Creek, O.**—The State Board of Health has approved plans for a public water supply.

**Columbus, O.**—City is considering the voting of \$1,000,000 bonds at the November election; one-half of this amount will be used for the Water Works Department in carrying out the scheme proposed when the storage dam was erected and the filtration plant was located; plan under discussion is for the erection of an immense pipe line from the storage dam to the filtration plant; line would be of sufficient size to carry the water from the dam to the filtration plant, and would be one of the largest in the country.

**Defiance, O.**—The Defiance Water Co. has selected Nicholas Hill, Jr., of New York City, to investigate the feasibility of piping water to Defiance from the fountain spring region in Mark and Farmer townships, 12 miles distant from Defiance; Engineer will also investigate the feasibility of a filtration plant.

**Springfield, O.**—City has decided to expend \$15,000 on water works extensions.

**Xenia, O.**—Plans for the new septic filtration plant to be installed at the Ohio Soldiers' and Sailors' Orphans' Home submitted by the Cleveland Engineering Co. have been accepted by the Trustees, and advertisement for bids for the contract ordered; an appropriation of \$15,000 was allowed by the Legislature for the improvement.

**Caddo, Okla.**—Citizens have voted \$55,000 bonds for construction of water works.—M. A. Earl & Co., Muskogee, Engineers.

**Chickasha, Okla.**—Council has approved plans drawn by City Engineer E. E. Colby for the improvement of water system by installing one turbine pump, 500,000-gallon filter, 250,000-gallon clear water reservoir, 650,000 gallons, also a standpipe and 11.6 miles of 6-in. mains; total cost, \$92,000; bonds will be voted.

**Hazleton, Pa.**—After going to a great

deal of expense and making an exhaustive study of conditions, the Hazleton Water Co. is now advertising for bids for the construction of a new pipe line from the Roan reservoir to this city and also the laying of new mains in the city.

**Lebanon, Pa.**—Dr. Samuel G. Dixon, Commissioner of the State Board of Health, has granted permission to lay a 20-in. main from the supply dams to opposite 4th and Oak sts.; a 16-in. pipe along Oak st. to 12th st.; a 12-in. pipe on 4th st. to Guilford st.; an extension of the present 12-in. main from 8th and Cumberland sts. to 8th and Guilford sts.; a 10-in. pipe on Guilford st. from 4th to 12th st., connecting the terminals of the 12-in. pipes.

**Pinegrove, Pa.**—Borough is considering the erection of a new reservoir.

**Shrewsbury, Pa.**—Citizens will vote on \$12,000 water works bonds.

**Cheraw, S. C.**—City is considering the construction of water works system.

**Aberdeen, S. D.**—A movement is being agitated by a prominent business man of this city to incorporate a company capitalized at \$500,000, for the purpose of piping water from Pickrel Lake and Enemy Swim, a distance of 60 miles, into Aberdeen, for drinking purposes.

**Bay City, Tex.**—Citizens have voted \$15,000 water works bonds and street improvement bonds.

**Bryan, Tex.**—City has selected Prof. James C. Nagle, Agricultural and Mechanical College of Texas, College Station, to supervise construction of water and sewer plant.

**Center, Tex.**—City has voted to increase bond issue to \$20,000 in order to extend water works.

**Cuero, Tex.**—City is considering the drilling of artesian wells for water supply; \$25,000 bonds will be available.

**Dallas, Tex.**—The Water Department is desirous of establishing a fire plug on every corner and where the blocks are very long a plug in the middle of the block.—R. R. Nelms, Secretary.

**Fort Worth, Tex.**—The Fort Worth City Water Works will lay three miles 8-in. and 10-in. cast-iron mains and construct stand-pipe of 500,000 gallons capacity; water to be brought from river for street sprinkling and fire protection.—D. C. Griffin, Superintendent.

**Quannah, Tex.**—City will vote on \$80,000 bonds for additions to water works and sewerage systems.—Address the Mayor.

**Seymour, Tex.**—City has sold \$35,000 water works and sewerage bonds to J. H. Caussey & Co. at \$1.02½.

**Tyler, Tex.**—Citizens have voted \$11,000 bonds for the extension of the water works into what is known locally as North Tyler.—John H. Bonner, Mayor.

**Bingham Canyon, Utah.**—The Independent Water Co. has been organized by John McDonald and Felix McDonald, of Bingham Canyon, and Chas. H. Pierce, of Salt Lake City, to supply water in Bingham Canyon; capital \$25,000.

**Norfolk, Va.**—City has decided to extend the Walnut st. water main up to Colonial ave. and install a fire hydrant at the end of the extended line; the laying of a 4-in. water main from James to Scott sts. is being considered.

**Spokane, Wis.**—Council has adopted a resolution instructing the Corporation Counsel to prepare an ordinance providing for an issue of \$400,000 bonds for improvements to the water works.—Arvid Reuterdahl, Water Commissioner.

**Warwood, W. Va.**—The Warwood Water and Light Co. has been incorporated with \$50,000 capital stock by B. W. Peterson, John A. Moore, James W. Ewing and Edmund P. Hunter.

**Arcadia, Wis.**—City has authorized the purchase of 500 ft. of 1½-in. and 1,500 ft. of 2-in. galvanized pipe for water mains.

**Grand Rapids, Wis.**—Preliminary plans are being prepared for water works to cost \$5,000 to \$6,000.—W. G. Kirchoffer, of Madison, Engineer; C. E. Boles, City Clerk.

**La Crosse, Wis.**—Alderman Kohn of the Water Committee has made a report regarding present water system and pumping station and recommended that a special committee consisting of the present Water Committee, three additional members and City Engineer be appointed to make a thorough investigation and report as soon as possible the advisability of moving the pumping station and the best methods of procuring a sufficient supply of water; committee also recommended the building of a new pumping station at head of Riverside Park, with intake pipes extending beyond the mouth of La Crosse and Black rivers, and erection of a settling basin or a water cleaning apparatus.

**Neenah, Wis.**—City will construct a reservoir near the north reservoir at a cost of \$1,000.

**Montreal, Que., Can.**—It is estimated that \$100,000 will be necessary to complete the new water conduit and intake pipes which

are to carry water for the city from the middle of the St. Lawrence River.

**New Westminster, B. C., Can.**—Council has decided to expend \$253,000 for water works improvements.

### BIDS RECEIVED AND CONTRACTS AWARDED

**San Francisco, Cal.**—The Board of Public Works has awarded contract for furnishing gate valves for auxiliary fire system to the Pelton Water Wheel Co., of San Francisco, for \$398,000.

**Waterbury, Conn.**—Bids were opened July 13 by the Board of Public Works for constructing a concrete dam and conduit for the diversion of Morris Brook, near the site of a new storage reservoir, in the town of Morris, and the contract has been awarded to George S. Abbott, of Watertown, for \$12,025.—R. A. Cairns, City Engineer.

**Bowling Green, Ky.**—Granberry Jackson, Mount Pleasant, Tenn., has awarded contract for a 3,000,000-gallon pressure filtration plant for the city to the Roberts Filter Mfg. Co., Philadelphia, Pa. Contract for building for housing this filter has been awarded to F. H. Keister, Bowling Green. Contract price on filter was \$10,309, and on building, \$3,298.

**Baltimore, Md.**—In spite of the vigorous protests of the Board of Fire Commissioners, Mr. D. B. Banks, the engineer who planned the pipe line, and Capt. F. H. Wagner, consulting engineer on the line, the Board of Awards has awarded the contract for the pipe-line boilers to the Edgemoor Iron Co., of Delaware, the lowest bidders, for \$41,000.

**Boston, Mass.**—Contracts have been awarded as follows, by the Metropolitan Water & Sewerage Board: For laying 3,900 ft. of 16-in. c.-l. water pipe in Revere, Contract No. 307, and for laying 12,300 ft. of 24-in. in Everett, Chelsea and Revere, to S. Camoia & Frank Williams, Boston, at \$3,111 and \$13,197, respectively.—Dexter Brackett, Chief Engineer.

**Braintree, Mass.**—Contract has been awarded by the Board of Water Commissioners for furnishing and laying 3,600 ft. 8-in. c.-l. water pipe, hydrants, special castings, etc., to Thomas Whelan & Co., of Quincy, Mass., at \$8,745.

**Hancock, Mich.**—Jas. J. Byers & Co., Houghton, have secured contract for excavating and laying pipe for the water works extension in West Hancock; length, about 5 miles; cost, \$13,511.

**Perth Amboy, N. J.**—The Board of Water Commissioners has received a proposition in writing from H. H. Bennett, of Belmar, for cleaning the ground storage wells at Runyon and repairing an abandoned well. The proposition is as follows: \$50 for moving well outfit to Runyon; \$50 a day for actual work of repairing wells; \$50 for removal of plant when work is done; \$4 per ft. for strainer furnished; \$10 for plug in "Kissner" well.

**Buffalo, N. Y.**—Bids have been opened by Francis G. Ward, Commissioner of Public Works, for excavating, concrete, brick and iron work for two pipe tunnels from 42 ft. easterly from present pumping station wall to the westerly crib line of Front St., and we are informed that the contract has been awarded to B. I. Crooker Co., of Buffalo, for \$21,500.

**New York, N. Y.**—Bids were opened by the Board of Water Supply, 299 Broadway, July 20, for Contract 39, to consist of furnishing and installing two 12,500,000-gal. steam turbo-turbine pumps, two 225-h.p. water-tube boilers, and all accessories at Jerome Avenue pumping station, Borough of Bronx, and the lowest bid received was submitted by the Lord Electric Co., 213 W. 40th St., for \$35,700.

**Niagara Falls, N. Y.**—The Water Commission has rejected the bids for laying the intake pipe and constructing the intake pier for the new water works system, for which the Buffalo Dredging Co. was low at \$63,000; reason for rejecting all bids was that all were above the estimate, \$53,400; other bids will be asked at once.

**Syracuse, N. Y.**—The Board of Contract and Supply has forfeited the check of \$900 given by John Davin, Jr., when he submitted his bid for the construction of the city water conduit across the south part of the city to University hill. Mr. Davin's bid was \$16,688, and he was awarded the contract; later he found that he had omitted some items and could not do the work at that figure; he declined to enter into the contract; now the Board will readvertise for bids on the work.

**Delta, O.**—The National Co., of South Bend, Ind., has secured contract for constructing water works, excepting pipe, hydrants and valves.

**Martins Ferry, O.**—The bids for the new boiler for the water works pumping station were opened July 15 by the Board of Service. The Keller Co., of Pittsburg, bid was the lowest, being \$2,995; Erie, \$3,033; Sterling Co., \$3,248; Heine Co., \$3,633.

**Holdenville, Okla.**—Council has awarded contracts as follows: For sewer, J. R. Stone, of Muskogee, \$14,500; water mains, Healy Construction Co., of McAlester, \$9,300, and reservoir and pumping station, M. B. Bryan, of Shawnee, \$39,974.

**Ft. Meade, S. D.**—Bids have been opened by Capt. Jas. S. Parker, Constructing Q. M., U. S. A., for constructing intake dam and pipe line for water system at this post, and the lowest bid received was that of Bartlett & Co., of Deadwood, for \$44,518.

**Salt Lake City, Utah.**—Bids have been opened for the sinking of a well at Levan, in Millard County, under the appropriation for test wells. Winn Bros. of Nephi offered to dig the well for \$3,300, and Frank Moore of Salt Lake for \$3,000. The well is to be 600 ft. deep, with a 3-in. width of pipe at the bottom. It is possible that the Board may decide to increase the upper casing from 6 to 8 inches.

Bids were also received for the work of building all the under work, including the foundations for the dam for the Piute reservoir project. The bids were: B. E. Brinton, \$20,265; Western Construction Co., \$22,679; J. Hogan, \$100,010.

**Seattle, Wash.**—The lowest of eleven bids submitted to the Board of Public Works for the lining of the intermediate and low service reservoirs at Green Lake was more than \$100,000 below the estimate of City Engineer E. H. Thomson, and was submitted by E. C. McDougall. The principal item in the bidding was that of concrete by the square yard. McDougall bid \$6.35 for it. The other bidders made the following tenders:

Grant Smith & Co., \$12.65; International Contract Co., \$9.58; Independent Asphalt Paving Co., \$11.15; Sparger Concrete Co., \$12; McAdam & Co., \$11; A. R. Gibson, \$7.86; Ide & Jones, \$9.37; Chamberlain Contracting Co., \$10.35; Hans Pederson, \$10.55; Ferro Concrete Construction Co., \$12.10.

Five of the bids were totaled. Grant Smith & Co.'s bid amounted to \$204,290, and this firm's bid for concrete was nearly double that of McDougall. The latter's bid was not computed, but will amount to between \$130,000 and \$135,000.

Thomson estimated the cost of the lining of the reservoirs at \$250,000. Each have a capacity of 60,000,000 gallons and the contract calls for the completion of the lining in 180 days.

**Seattle, Wash.**—The lowest bid opened by the Board of Public Works for water mains on 11th Ave., W., was that of the American Contract Co., for \$8,124.

**Sheboygan, Wis.**—The Municipal Water Commission has awarded contract for new intake into Lake Michigan, 5,000 ft., to Starke Dredge & Dock Co., Milwaukee, Wis., at \$7 per lin. ft. for doing the work and furnishing machinery and labor. Cast-iron pipe will be purchased direct by the commission.

**Spooner, Wis.**—Wm. C. Fraser, of Rochester, Minn., has been awarded a contract for furnishing and laying 2,700 ft. of 4-in. pipe in 7-ft. trench at 65c. per ft.; 600 ft. of 6-in. pipe in 7-ft. trench at 85c. per ft.; wages of common labor, \$1.75 per day; also for seven Watrous hydrants, 5-in. connection, 2½-in. nozzle, in 7-ft. trench, at \$38; four Watrous hydrants, 4-in. connection, 2½-in. nozzle, in 7-ft. trench, at \$25; also one 6-in. gate valve, 160 pounds pressure, at \$21.50 each, and one 4-in. at \$17.50. Totals of all bids were: W. S. Patterson, Appleton, Wis., \$2,060; Houghton & Johnson, Two Harbors, Minn., \$2,992; W. I. Gray, Minneapolis, Minn., \$2,504; William Hawdroth, \$2,999; Sweeney Bros., \$2,485; W. C. Fraser, Rochester, Minn., \$2,445; John Sandstrom, Ashland, Wis., \$3,350.—John Stewart, Village Clerk.

**Ft. D. A. Russell, Wyo.**—The following are the bids opened by the Constr. Q. M., U. S. A., Cheyenne, for (a) water extension; (b) sewer extension; (c) storm sewer, at Ft. D. A. Russell: W. W. Keefe, Cheyenne, Wyo., a \$21,242, b \$17,932, c \$7,875; Morrison Contr. & Mfg. Co., Denver, Colo., a \$34,000, b \$29,825, c \$10,100; J. J. Hani-ghen, Omaha, Neb., a \$23,850, b \$14,253, c \$11,163; Peter O'Brian, Denver, Colo., a \$27,000, b \$15,600, c \$10,750.

### LIGHTING AND POWER

**Albertsville, Ala.**—The Sand Mountain Electric Co. will develop its water power on Short Creek and extend its transmission lines to Boaz; distance five miles.

**Birmingham, Ala.**—Mayor O'Brien has decided to recommend to Council the installation of electric light plant.

**Dothan, Ala.**—Citizens will vote August 9 on \$6,000 bonds for the extension of the electric light system; the recent election has been declared illegal.—J. B. McCrary & Co., Empire Bldg., Atlanta, Ga., Engineers.

**Tuscaloosa, Ala.**—A. N. Walker, of Scranton, Pa., and J. H. Hagerty, of Americus, Ga., will form a company to erect a combined gas, electric light and power plant.

**Phoenix, Ariz.**—Council has received an



application from John W. Sharpe for a franchise to construct and operate a gas and electric light plant.

**Bakersfield, Cal.**—The West Side Electric Co. has applied to the Board of Supervisors for an electric transmission franchise covering the West Side oil fields, from Sunset to McKittrick.

**Crescent City, Cal.**—The Smith River Electric Co. has been incorporated for the purpose of utilizing the water power of the Smith River for the generating of electrical energy in Del Norte and Humboldt counties; the construction of two power plants is being planned.

**Downieville, Cal.**—The Four Hills power house, recently leased by J. R. Van Fleet, will soon be rebuilt.

**Escondido, Cal.**—An electric lighting and power plant will be erected at this place; cost, \$30,000; crude oil will be the fuel for the steam generating plant.

**Pasadena, Cal.**—Manager Joiner has recommended that 280 tungsten lamps be installed; cost \$36,226.

**Redondo, Cal.**—The City Trustees have recommended a new lighting system in the business section; recommendation specifies the installation of about 2,000 incandescent lamps.

**Denver, Col.**—The Art Commission has approved the lighting plans for the esplanade, the 14th st. viaduct and the Sunken Gardens.

**Ansonia, Conn.**—The Park Commissioners are considering plans for lighting River-view Park by electricity.

**New Haven, Conn.**—The United Illuminating Co. will increase the size of its present power plant.—E. K. Parker, Superintendent.

**Washington, D. C.**—Electrical Engineer Allen has recommended the installation of 13 street lamps in the suburbs and 16 electric incandescent lamps in Chevy Chase Park; also 30 naphtha lamps, 14 gas lamps, three electric incandescent and two electric lights in the northeastern part of the city.

**Leesburg, Fla.**—City has granted a 30-year franchise to J. Y. Clark for construction of electric light system.

**Adairsville, Ga.**—City is considering construction of electric light and sewer systems.

**Champaign, Ill.**—Congressman McKinley, of the Illinois traction system, has closed a deal for the Des Moines electric works at a price aggregating considerably over \$1,000,000; a great system of interurban radiating from Des Moines is a part of the plan of his company.

**East Moline, Ill.**—The East Moline-Silvis Lighting Co. has been incorporated, with a capital of \$5,000, to furnish light, heat and power.—John A. O'Neill, Thos. J. Gorman and Jas. L. Vernon, incorporators.

**Elburn, Ill.**—The Village Trustees are considering the construction of an electric light plant.

**Joliet, Ill.**—The plan for the new system of electric lighting for a number of blocks in the downtown district has been received with such favor by the property owners that the material will be ordered at once by the Economy Light and Power Co. and the work of construction will begin as soon as it arrives.—Charles A. Munroe, Local Manager.

**Streator, Ill.**—Council has granted a 25-year franchise to the proposed new gas company to operate a heat, light and power plant.

**Knightstown, Ind.**—Council has authorized the Trustees of the municipal water and light plant to purchase two additional dynamos and other machinery for the light and power department.

**South Bend, Ind.**—A comprehensive lighting scheme for all of South Bend's business streets not now lighted by arches is proposed by leading merchants, bankers and other business men and a vigorous effort will be made to carry it out; plan as now outlined contemplates the lighting of Michigan st. from LaSalle ave. to Jefferson, Main st. from LaSalle or Colfax aves. to Wayne st., Washington st. from Vistula ave. to Lafayette, Vistula ave. from Washington to Jefferson, and Jefferson from Vistula ave. to Lafayette; lights are to be either gas or electricity, according to whichever bid is the lowest; lamps are to be arranged in clusters supported by ornamental posts.

**Bern, Kan.**—Ernest Gerber will rebuild electric light plant destroyed by fire; an 8x10 or 9x10 high-speed, secondhand engine and a 20-kw. alternator, or an engine of the same size, direct connected, with a 110-220-volt three-wire unit will be purchased.

**Madisonville, Ky.**—Bids have been received for new machinery for the municipal lighting plant amounting to \$7,000; all of the bids were unsatisfactory, and others will be received for the proposed improvements.

**Whitesburg, Ky.**—Citizens are considering establishment of an electric light plant. David C. Mullins is interested.

**Topsfield, Mass.**—The Beverly Gas and

Electric Light Co. has been granted permission to furnish electricity for light, heat and power in this town.

**Negaunee, Mich.**—The Council has passed an ordinance granting the Cleveland Cliffs Iron Co. a franchise for the construction and maintenance of an electric transmission line within the city limits.

**Ely, Minn.**—Council is receiving bids for furnishing 100 light meters.

**Kansas City, Mo.**—People's Ice Co. has decided to rebuild burned power house.

**Springfield, Mo.**—Springfield Gas and Electric Co. has been granted franchise for 20 years; will issue bonds to make improvements to plant.

**Callaway, Neb.**—The Callaway Electric Light and Power Company has been incorporated; \$15,000 capital stock.

**Hastings, Neb.**—The Water and Light Committee has been authorized to purchase a carload of poles for the electric service wires.

**Lucky Boy, Nev.**—Town is soon to have a large electric power plant which will furnish light and power for the camp and the mines; power plant is to be located on the Walker River, about 15 miles from Lucky Boy; P. J. Conway, of Sweetwater, Nev.; Judge Costigan and Dr. Pollard, of Denver, are interested; it is planned to supply light and power for the camps of Lucky Boy, Hawthorne, Masonic, Bodie and Aurora.

**Franklin, N. H.**—The Boston & Maine Railroad will soon put engineers to work figuring on plans for converting the water power bought of the Pemigewasset Power Co. into electricity.

**Irrington, N. J.**—Town Council will re-advertise for bids for lighting streets as no bids were received on date set for receiving proposals.

**Binghamton, N. Y.**—The Binghamton Railway Co. will expend about \$50,000 for improvements on its State st. power plant, which will include the installation of a turbine, new boilers and new condensing apparatus.

**Nicholville, N. Y.**—The Nicholville Electric Light Plant will construct about two miles of transmission line.—R. C. Chambers, Manager.

**Ardmore, Okla.**—The Arbuckle Power Co. and the Arbuckle Townsite Co. have been organized for the purpose of promoting a power site on the Washita River near Dougherty and for the purpose of selling townsite property in that town; company will at once begin work on a dam that will cost \$140,000.

**Durant, Okla.**—Plans are being prepared by the Southern Engineering Co., Oklahoma City, for the city electric light plant; also for a sedimentation basin for the water works.—W. S. Shannon, City Clerk.

**Medford, Okla.**—City is considering the installation of an electric light plant.

**Tulsa, Okla.**—Right-of-way to the Prairie Oil and Gas Co. for the immediate construction of an 8-in. pipe line for the purpose of conducting oil from a point in Tulsa county, Oklahoma, in the Glenn pool field through the Creek, Cherokee and Choctaw nations in southeastern Oklahoma to the Oklahoma-Arkansas State line, a distance of 151 miles, has been approved by Acting Secretary of the Interior Pierce; pipe line will then run on to Baton Rouge, La.

**Baker City, Ore.**—George W. Sturtevant will build a power plant on the Eagle River, near this place; cost \$600,000.

**Talent, Ore.**—The Jackson County Light & Power Co. has been incorporated, with a capital of \$10,000. A. W. Silsby is interested.

**Toledo, Ore.**—The Council has granted a franchise to H. L. Collins, A. C. Smith and J. F. Stewart for the erection and maintenance of an electric light plant in this city.

**Chester, Pa.**—Manager A. R. Granger, of the Beacon Light Co., and D. J. Deakne, Chairman of the Light Committee, have visited Camden, N. J., to secure data concerning street illumination.

**Milbank, S. D.**—Oscar Claussen has petitioned for a franchise to construct and maintain an electric light plant.

**Binghamton, Tenn.**—The Binghamton Light and Power Co. will double boiler and generator capacity of plant.—W. M. Tucker, Manager.

**Beaumont, Tex.**—The South Beaumont Water and Light Co. has been incorporated with \$10,000 capital stock by E. B. Baldwin, E. V. Hayden and F. E. Potts.

**Houston, Tex.**—The Houston Gas Co. will spend fully \$100,000 per year for the next few years in the way of extensions and additions to its plant and facilities in this city.—C. H. Dunbar, General Manager.

**Kingsville, Tex.**—The Kingsville Power Co. has been incorporated with \$20,000 capital stock by Robert J. Kleberg, H. Delmo and Caesar Kleberg.

**Murray, Utah.**—The Progress Power Co. is considering the construction of a power plant in Big Cottonwood canyon.—J. P. Cahoon, Manager.

**Winchester, Va.**—The officials and Ex-

ecutive Committee of the Winchester and Washington City Ry. Co. have inspected the company's big power plant along the Shenandoah River at Millville, W. Va., and decided to make extensive improvements at once; capacity of the plant will be further increased.

**Peshastin, Wash.**—The Valley Power Co.'s plant in this city will double its capacity.

**Barboursville, W. Va.**—City is considering the issuance of \$3,000 electric light bonds.

**Charleston, W. Va.**—To harness the power of the Great Cacapon River in the eastern section of West Virginia is the purpose of the Hydro-Electric Developing Co., of Great Cacapon, Morgan county, lately chartered.—Wm. B. Osler and Morris A. Orndorff, of Great Cacapon; Samuel R. Boyer, of Hanover, Pa.; P. Albert Holland, of Baltimore, and Wm. F. Disher, of Berkeley Springs, W. Va., incorporators.

**Edgerton, Wis.**—The Janesville Electric Co., Janesville, has purchased the local electric plant and will make improvements.

**Montello, Wis.**—The Montello Granite Co. will improve its water power plant, install a larger dynamo and establish an all-night and day service.—L. S. Pease, General Manager.

**Prairie du Sac, Wis.**—The Secretary of War has approved the application of the Southern Wisconsin Power Co. for the right to construct a dam across the Wisconsin River at Prairie du Sac; this is the most important step in the development of the great water power scheme at Kilbourn and will facilitate the plans that contemplate supplying electric power to Madison, Milwaukee and other points in southern Wisconsin.—John M. Whitehead, Janesville, and Burr W. Jones and Magnus Swenson, of Madison, are interested.

**Prescott, Wis.**—City has granted a 25-year franchise to the Prescott Light & Power Co.

## BIDS RECEIVED AND CONTRACTS AWARDED

**Washington, D. C.**—Bids were opened, July 26, by the Bureau of Supplies & Accounts, Navy Dept., Washington, D. C., for furnishing and installing at the Naval Training Station, Newport, R. I., Sch. 1393, a boiler, stoker, stack, and connecting flues, and constructing 90 cu. yd. foundation for boiler and piping, fitting, and accessories, and removing portions of dry room wall and roof, and the lowest bid was that of the G. & W. Mfg. Co., of New York, N. Y., for \$11,630.

**Indianapolis, Ind.**—The Merchants' Heat and Light Co. has let a contract to J. G. White & Co., 49 Exchange place, New York, for constructing a central station.

**Tallahassee, La.**—Contracts for electric lighting plant machinery, bids opened July 10, has been awarded as follows: Engine, Harrisburg Fdry. & Mch. Co., Harrisburg, Pa.; electric equipment, Ft. Wayne Electric Co., Ft. Wayne, Ind., and pumps to Platt Iron Works, Dayton, O.—J. E. Craig, City Engineer.

**New Bedford, Mass.**—The following are the bids opened by the County Commissioners for furnishing and installing electric lighting and gas fixtures in the Registry of Deeds Bldg.: H. F. Esterbrook, Inc., Boston, \$7,706; The Wilkinson Co., Inc., New Bedford, \$7,047; Pettengill, Andrews Co., Boston, \$6,989; Eastern Electric Co., New Bedford, \$6,985; McKenny & Waterbury Co., Boston, \$6,773; Robert B. Ireland Co., Boston, \$5,598, awarded contract, and E. H. Tarbell Co., Boston, \$3,786.

**Buffalo, N. Y.**—Bids have been received by Francis G. Ward, Commissioner of Public Works, for a steam turbine generator capable of delivering 100 kw. at 125 volts. The contract has been let to Ferrar & Trefl, city.

**Fulton, N. Y.**—Contract for construction of the power house of the Fulton Light, Heat and Power Co. on North 1st and Van Buren sts. has been awarded to John Hendrick, of Oswego, and Joseph Connors, of this city.

**Springfield, O.**—The Springfield Light, Heat and Power Co. has let a contract to the American District Steam Co., of Lockport, N. Y., for the necessary 18-in. pipe for the construction of a main from the intersection of Main st. and Fountain ave., North, to Columbia st.; it will cost about \$30,000.

**Reading, Pa.**—The Reading Electric Co. was awarded the contract to light the local postoffice for \$1,748 a year.

**Galveston, Tex.**—The firm of Masterson & Youens has received the contract for erecting the electric arches in the city and will begin work immediately.

**Galveston, Tex.**—The Board of City Commissioners has awarded contract to General Electric Co., Schenectady, N. Y., to construct luminous are rectifier lighting system, and to Erie City Iron Works, Erie,

Pa., to install engine and generator at electric light station; cost \$22,000.—W. D. Masterson, City Superintendent of Electricity.

**Seattle, Wash.**—Meacham & Babcock submitted the lowest bid for cluster lights on 2d and 3d avenues south., between Yesler Way and King Sts., and Occidental Ave., for \$19,603, and the Olympic Fdy. Co. for the posts at \$3,824.

**Saskatoon, Sask., Can.**—Bids have been opened for one 500-k.w., 2,200-volt, 60-cycle, 150-r.p.m., two-phase generator, exciter and switchboard installed complete, and a 750-h.p., 150 r.p.m., vertical Corliss engine, with necessary condensing apparatus. Installed complete; contract has been awarded to the Allis-Chalmers-Bullock Co., of Montreal, Que., for \$6,860.—J. N. Truesdale, City Clerk.

## FIRE EQUIPMENT

**Gadsden, Ala.**—City will purchase 1,000 ft. of hose.

**Huntingdon Beach, Cal.**—City will purchase a 60-gallon chemical engine; also 300 ft. of single jacket, cotton rubber lined hose.

**Salida, Cal.**—City will install a Gamewell fire alarm system.—Address Capt. D. B. Renwick.

**San Francisco, Cal.**—The Fire Commission has asked for the purchase of five additional sites for firehouses.

**New Britain, Conn.**—City is considering the need of a motor-propelled chemical.

**Georgetown, Del.**—City has decided to purchase a quantity of hose.

**Washington, D. C.**—The District Commissioners have rejected all bids for furnishing 15,000 ft. of 2½-in. cotton rubber-lined fire hose; new bids will shortly be called for.—Henry B. Macfarland, President.

**Chicago, Ill.**—Fire Marshal Horan has recommended the need of the following: Four new 32-in. boilers, to replace old ones; two new 36-in. boilers, new fire station at Rogers Park and repairs to two fire boats.

**Maywood, Ill.**—City will purchase a hook and ladder truck; also 1,000 ft. hose.

**Omaha, Ill.**—City will build and equip a fire station.

**Indianapolis, Ind.**—Over the protest of City Comptroller George T. Breunig, Mayor Bookwalter will recommend a bond issue for the erection of three engine houses; when this bond issue is made, provided the Council consents to authorize it, the bonding power of the city will be practically exhausted.

**Menville, Ia.**—City will purchase hose cart and 520 ft. of hose.

**Lawrence, Kan.**—City is considering need of an automobile and an engine.

**Paducah, Ky.**—Architect A. L. Lassiter and Fire Chief James Wood are preparing plans for fire station.

**Vicksburg, La.**—City is considering erection and equipment of a \$7,000 fire station.

**Baltimore, Md.**—Fire engine houses will be erected on the properties at Baker st. and Fulton ave., embracing 1563, 1565 and 1567 North Fulton ave. and on Baltimore st. near Fremont ave., embracing 756, 758 and 760 West Baltimore st. and 761, 763 and 765 Raborg st.

**Hull, Mass.**—Citizens have voted to purchase a new auto chemical engine; cost \$800.

**Lawrence, Mass.**—The Public Property Committee is considering the purchase of 4,000 ft. of hose; cost, \$3,000.

**Lawrence, Mass.**—Plans have been prepared for a three-run fire station and may be selected for proposed engine house to be erected in Ward 5; installation of a fire alarm system is being considered.

**Lowell, Mass.**—Mayor Brown, Chief Hosmer of the Fire Department, and Purchasing Agent Mackenzie will visit Hartford, Conn., and Springfield, Mass., in order to inspect automobile fire apparatus prior to the asking for bids for the construction of an automobile protective wagon.

**Methuen, Mass.**—Citizens have voted to purchase 300 ft. of hose; \$175 has been appropriated.

**Middleboro, Mass.**—Town is considering matter of better fire protection.

**Monson, Mass.**—Firemen are urging the purchase of an auto truck.

**New Bedford, Mass.**—Chief Dahill is urging the purchase of an \$8,000 auto engine.

**Palmer, Mass.**—The Engineer of the Fire District is in favor of automobile trucks for fire purposes.

**Cannon Falls, Minn.**—Fire Chief F. W. Scofield has recommended the purchase of 300 ft. of hose and a Larkin shut-off nozzle.

**Duluth, Minn.**—The Fire Commissioners are urging the purchase of first-class fire engine and repairs to one of the fire halls.

**Echo, Minn.**—Citizens have voted \$2,500 for a pressure tank and engine.

**St. Louis, Mo.**—City Comptroller Taussig will sell \$100,000 Fire Department bonds Sept. 17.

**St. Louis, Mo.**—Architect Frank A. Hueser has prepared plans for two engine houses; cost \$32,000.—M. Reber, President Board of Public Improvements.

**Great Falls, Mont.**—City is considering the installation of additional chemical apparatus.

**Belmar, N. J.**—Citizens have voted \$15,000 for an engine house to be erected at 9th and E sts. and \$5,000 for a fire engine.

**Hackettstown, N. J.**—Council is considering extension of fire alarm system.

**Irvington, N. J.**—Town Council has sold \$7,500 fire house bonds to the Merchants' National Bank.

**Long Branch, N. J.**—Ordinances have been introduced in Council for the reorganization of the Long Branch Fire Department.

**Paterson, N. J.**—The Fire Committee of Borough Council has decided to purchase a hook and ladder truck, hose and hose cart, at a cost of about \$1,500.

**Rutherford, N. J.**—City will build and equip a two-company fire station.

**Sewaren, N. J.**—Town is considering matter of fire protection.

**Shrewsbury, N. J.**—The local fire company will begin at once the construction of a firehouse on a lot in Broad st.; plans for the firehouse have been drawn by William A. Shoemaker; cost, about \$1,000.

**Brooklyn, N. Y.**—Architect A. S. Hedman has prepared plans for a three-story \$68,000 engine house, and Architect Alexander Stevens, Manhattan, plans for a \$35,000 house.—Nicholas J. Hayes, Commissioner.

**Ebenezer, N. Y.**—Architect Thos. W. Harris, Buffalo, has prepared plans for altering present fire house.

**Olean, N. Y.**—Citizens have voted \$119,000 bonds for erection of three firehouses and other improvements.

**Poughkeepsie, N. Y.**—The Lady Washington Hose Co. has asked Council for a new double-tank chemical and hose wagon combined; cost \$2,300; the Niagara Co. has asked for a duty wagon.

**Wahpeton, N. D.**—Council is considering improvement of the equipment of the Fire Department.

**Chillicothe, O.**—Architects Schweitzer & Pettit, 26½ West Main st., have prepared plans and will soon receive bids for an \$8,000 Fire Department building.

**Covington, O.**—Alderman W. H. Ranshaw is urging the installation of a complete fire alarm system; Council has authorized the Fire Commissioners to purchase 1,600 ft. of new hose.

**Lebanon, O.**—The little village of Monroe has decided to purchase two dozen buckets, three dozen ladders and a carload of Royal fire extinguishers for the fire department.

**Portland, Ore.**—Construction of the five new engine houses, which were authorized by Council the first of the year, will be hastened by the new administration; the Executive Board has adopted plans which have been prepared by Architect J. R. Wilson for the engine house to be located at 15th and Montgomery sts., and the City Auditor has been authorized to advertise for bids for the building; this structure will be of brick.

**Gettysburg, Pa.**—Citizens will vote on \$60,000 bonds for fire protection.

**Meyersdale, Pa.**—City has decided to purchase 2,000 ft. of fire hose.

**New Castle, Pa.**—The purchase of an auto chemical, hose and engine is being considered.

**Scranton, Pa.**—City is planning to replace the headquarters of Engine Company No. 6 with a combined fire and police station; contract will at once be awarded for house to be erected on South Irving ave.; a new company will be installed.—H. L. Ferber, Chief.

**Williamsport, Pa.**—The Fire Committee is considering the erection of an addition to No. 5 fire station.

**Brownwood, Tex.**—City will receive bids on one two-horse hose reel, 2,000 ft. of fire hose and four hose nozzles; bids must reach the Secretary's office by August 2.—Cyrus A. Tunnell, Secretary.

**Dallas, Tex.**—The Board of Commissioners has adopted the annual budget; \$1,825 is provided for an automobile for Fire Chief; \$625 for fire alarm boxes; \$1,800 for 2,000 ft. of hose; \$16,500 for new station in Oak Lawn; \$5,750 for a new steamer and heater to replace No. 6; also \$4,340 for fire and police alarm system.

**Waco, Tex.**—Citizens have voted \$25,000 for fire stations.

**Milwaukee, Wis.**—City will build and equip two engine houses; an additional fire engine will also be purchased; \$20,000 will be expended.

**Oxfordville, Wis.**—City will purchase 100 ft. of hose, a 50-gallon combination chemical wagon and a truck.

**Wausau, Wis.**—City is considering the erection of two fire houses at a cost of \$10,000.

**Cheyenne, Wyo.**—Chief Hoyt has recommended the purchase of a new aerial truck.

## BIDS RECEIVED AND CONTRACTS AWARDED

**Nevada City, Cal.**—The City Trustees have let a contract to the Gamewell Fire Alarm Co. for installing a battery system of fire alarms; gravity system now costs the city about \$140 per year, while the battery system will cost not more than \$15 per year; an automatic switchboard will also be installed.

**Hartford, Conn.**—The Board of Contract and Supply, in the face of a contradictory recommendation from the Fire Commissioners, awarded the contract for two new automobiles to the Elmer Automobile Co. The first set of specifications submitted by the Fire Commissioners brought in half a dozen bids from low-priced cars, but of all these the Ford was easily the lowest. The Fire Commissioners, however, said the car was too light for the Department work, and was not strong enough in heavy weather to meet the demands made upon it; when the Ford won the first bidding competition on a 22-horsepower car, the Fire Commissioners recommended that all bids be rejected, which the Board of Contract and Supply did, and the Fire Board sent in another set of specifications, calling for a car of 25-30 horsepower. Mr. Elmer, local agent for the car, said he would supply two cars at \$987.50 each, to meet the specifications in every particular, and said the factory would turn out a special engine to meet the demands of the Fire Board; the Board, however, recommended that the bid on the Ford car be rejected, as six months is too long a time to wait for the cars, and it was simultaneously recommended that the contract be awarded to the Capitol City Auto. Hack and Livery Co., who offered two Mitchell cars, Model J, at \$1,300 each. Mr. Elmer said he would agree to deliver two Ford cars in five months, and said they would be 1910 cars, whereas any other car bought now would be a 1909 car. The motion of President Clark was amended so that the contract was awarded to Mr. Elmer to deliver the two Ford cars at \$987.50 each, within five months.

**Batavia, N. Y.**—Bids for two 25-ft. steel ladders for the city fire department have been opened and the contract let to the U. S. Wind Engine & Pump Co. The low bid was \$24.74. Other bids received were as follows: Batavia Engineering Co., \$35; Challenge Manufacturing Co., \$46.

**Akron, O.**—Council has authorized the Board of Public Safety to purchase from the Diamond Rubber Co. \$3,500 worth of fire hose for the fire department.

**Sharon, O.**—City will purchase 14 hose couplings from the Republic Iron and Steel Co. at 20c. per pound.

**Johnstown, Pa.**—Drs. George W. Wagoner and J. B. McNeny, and J. Earl Ogle, composing the Board of Fire Commissioners, together with Chief Logan Keller, have decided on the location of the ten new fire alarm stations recently contracted for with the Gamewell Fire Alarm Telegraph Co.

## ELECTRIC RAILWAYS

**Hixon, Ala.**—The Hixon, Sumter & Northwestern Railroad Co. has been incorporated to build a line of road from this city to the Mississippi line. John Alexander, G. G. Hixon, J. M. Hixon, and J. F. Hughes, incorporators.

**Little Rock, Ark.**—The Pine Bluff-Little Rock Transit Co. will commence work within 30 days on the construction of its interurban line from this city through Pine Bluff to White City; distance 125 miles.—S. A. Miller, Pine Bluff, Secretary.

**Auburn, Cal.**—W. S. Fletcher, Pasadena, has applied for a franchise to build an electric road from Colfax to Bath; distance, 16 miles; cost, \$250,000.

**Monterey, Cal.**—The Monterey & Del Monte Heights Railway has been incorporated to construct a street railway from Monterey to Seaside; distance, 5 miles. H. R. O'Bryan, President; A. G. Metz, secretary and Treasurer.

**Ocean View, Cal.**—Board of Trustees has granted to the Southern Pacific Railroad Co. a franchise for the construction of an electric railway.—R. F. Sherman, General Manager, Los Angeles.

**Salinas, Cal.**—The Board of Supervisors has granted to H. R. O'Bryan an electric railway franchise in county.

**Yuma, Col.**—Messrs. Karr, Kester and Speese have petitioned for a franchise to construct an electric railway over the streets; line will be operated in conjunction with their proposed Colorado River Railway.

**Hartford, Conn.**—The Senate has passed a resolution extending the time for organization of the Willimantic and Southbridge Street Railway Co. until November 1, 1910; provided, however, that if the Railroad Commissioners shall find that on November



1, 1910, at least 25 per cent of its lines shall have been constructed as aforesaid, said franchise rights shall be extended and remain in force until the rising of the General Assembly at its January session, 1911.

**Atlanta, Ga.**—The Atlanta, Griffin & Macon Electric Railway Co. has completed surveys and has secured right-of-way for the electric railway between this city and Macon via Griffin.

**Rome, Ga.**—The Rome Railway and Light Co. will construct about two additional miles of electric railway.—H. J. Arnold, Superintendent.

**Boise, Ida.**—The Albion Interurban Railway System, Limited, has been incorporated to connect Albion and Burley with an electric railway 20 miles in length; capital, \$150,000.

**Aurora, Ill.**—Council has passed the traction ordinance practically in terms in which it was first drafted; by the terms of the new ordinance the A., E. & C. gets a 20-year extension of franchise, paying \$30,000 in cash and \$1,000 for 20 years and promises to put fenders on street cars and to give transfers from interurbans to city cars when the interurbans are boarded within the city limits; the Aurora and DeKalb ordinance was also passed; it gives the interurban road the right to enter Aurora for 20 years, the city receiving \$2,500 in cash and \$500 a year for 20 years.

**Jacksonville, Ill.**—The Alton, Jacksonville & Peoria Railway will begin work in December on proposed line from Alton to Peoria via Jacksonville.—J. C. McGrath, Jerseyville, is interested.

**Indianapolis, Ind.**—A request for continuation of receivership of the Indianapolis & Cincinnati Traction Co. and for renewal of the receiver's certificates until after August 1, 1910, has been filed with Judge Carter, of the Superior Court, by trustees representing the bondholders under the reorganization agreement; trustees plan to extend the road from Connersville to Hamilton, which will give them a through line to Cincinnati.

**Vincennes, Ind.**—The Vincennes Western Electric Railroad Co. has been incorporated to build an electric railway to connect Vincennes and Bridgeton; length 14 miles.

**Council Bluffs, Ia.**—Citizens are urging the construction of a street car line from Ave. A south on 21st st. to 5th ave.

**Worcester, Mass.**—The Board of Aldermen has granted to the Worcester Consolidated Street Railway Co. a franchise to lay tracks in Hamilton st. from the terminus of the present route to Lake Park.

**Lansing, Mich.**—The Detroit, Lansing & Grand Rapids Railway has been incorporated to build an electric railway to connect Detroit, Lansing and Grand Rapids; capital stock, \$25,000. Oliver H. Lau and Henry M. Wallace, incorporators.

**Hannibal, Mo.**—The Hannibal & Jefferson City Interurban Traction Co. has been incorporated to build an interurban railway from Jefferson to this city; distance 120 miles.—F. T. Hodgdon, C. H. Northam, of Hannibal, and J. O. Allison, of New London, incorporators.

**Butte, Mont.**—The Board of County Commissioners has granted to the Butte Electric Railway a franchise to build an electric railway in the McQueen addition.—J. R. Wharton, Manager.

**Missoula, Mont.**—County Commissioners have granted a 50-year franchise to the Missoula Street Railway Co. which permits the company to use the public highways of the city within a radius of four miles of the south end of the Higgins ave. bridge.

**Gardnerville, Nev.**—H. H. Springmeyer and A. Jensen have been granted a franchise to build a street railway from the terminus of the Carson Valley branch of the Virginia & Truckee Railway to Gardnerville; distance one mile.

**New Brunswick, N. J.**—An electric road from New Brunswick to the Delaware is one of the possibilities under the plan of electrifying the New Brunswick and East Millstone Railroad which has been discussed by the stockholders in this vicinity.

**Albany, N. Y.**—The Hornell-Bath Railway Co., formed to operate an electric road from Hornell to Bath, 24 miles, has been incorporated with a capital of \$250,000. The directors include Charles Adsit, C. H. Armsted, John M. Finch, of Hornell; J. F. Turk, of Hammondsport.

**Albany, N. Y.**—Receivership proceedings for the Albany & Hudson are declared to be part of a general scheme at extensions of the road, which is a third track electric line, directly from Albany to Pittsfield; reorganized company will also buy the Albany & Greenbush Bridge, which is the only gateway across the Hudson River at this point, and therefore is necessary to the completion of any cross-the-State system of electric lines, which could compete effectively in the future with the steam railroads. Raymond H. Smith, General Manager of the road, has been appointed by Supreme Court Justice Fitts receiver of the Albany & Hudson, on his filing of a bond for \$100,000.

**Elmira, N. Y.**—An application will be presented to Council asking for a permit to extend the tracks of the Elmira Water, Light and Railroad Co. on Maple ave. to the city limits, in order to thus connect with the tracks of the Elmira, Waverly & Corning line and give the interurban line a means of entering the city.

**Geneva, N. Y.**—Council has given the Geneva & Auburn Railway Company a perpetual franchise to extend its line in Washington st. from Pultney to the city line.

**New York, N. Y.**—Work on the proposed monorail road between Bartow Station and City Island, to replace the existing horse car line, will be begun early in the fall. It was announced by the office of the Public Service Commission; the road is to be constructed by the American Monorail Co., which recently applied to the Commission for authority to make a bond issue of \$100,000.

**Bryan, O.**—The Ft. Wayne & Toledo Electric Railway Co., of Harlan, Ind., has applied for a franchise; company proposes to build an electric railway from Ft. Wayne, Ind., to this city; distance 55 miles.—R. T. Bastress, Harlan, General Manager.

**Ironton, O.**—William Lemley, of Huntington, has petitioned County Commissioners to grant a franchise for the proposed street trolley line from Gallipolis to Ironton.

**Tulsa, Okla.**—The West Tulsa Belt Railway Co. has been chartered to build a belt line; length five miles; estimated cost, \$20,000.—W. E. Hawley, C. L. Hounker, Jr., Hettie C. Hall, John A. Haver and Gray Erick, Directors.

**Pendleton, Ore.**—Promising approximately 200 miles of electric railroad for Umatilla county, articles of incorporation have been filed for the Umatilla Railway and Electric Power Co.; capital stock is \$100,000 and the incorporators are State Senator C. J. Smith, of this city, and Douglass Belts and A. R. Turner, two of the prominent stockmen of the southern end of the county; one arm of the proposed system is to extend in a southerly direction from Pendleton through Pilot Rock, Nye, Albee, Ukiah and on into Grant County with Dale as its terminus; this will be a little less than 100 miles in length; remainder of the system will consist of a loop line from Pendleton northwest across the wheat fields to Simmonds Landing or Cold Springs, then down the river to Umatilla and back again across the Government and Furnish-Coe projects to Pendleton; this line will be more than 100 miles in length; power for this system of roads is to be developed from the waters of Camas Creek, a mountain stream in the southern part of the county.

**Waynesboro, Pa.**—The Chambersburg, Greencastle & Waynesboro Electric Railway Co. has decided that the franchise for the extension in the northern part of town should be accepted and that the line should be built.

**Charleston, S. C.**—At a meeting of the Joint Committee of Ways and Means, Streets and Railroads of City Council, called to consider the grant of a franchise to the proposed new railway company, President P. H. Gadsden of the Consolidated Railway, Gas and Electric Co. appeared and urged the protection of interests of his company and announced that the Consolidated company was now prepared and anxious to extend its Rutledge ave. route to Hampton Park, and that at the next meeting of City Council a petition would be submitted asking an amendment of the company's franchise whereby Council may, at any time in the future, upon a two-thirds vote, require an extension of the lines of the road in streets not now covered.

**Houston, Tex.**—The County Commissioners have passed an order granting a franchise to L. A. Anderson to build a street car line on what will be known as "Bellair Boulevard," when the road is completed and the right of way deeded to the county; permission was granted Mr. Anderson "to open and build two shelled roadways separated by a strip 50 ft. wide, each road having 14 ft. surface, from Main st. to the east property line of the 'Rice Ranch,' and 12 ft. surface thence to the Richmond road; for the building of a portion of the above road the Commissioners appropriated \$21,000 from the current road and bridge fund of Harris county. The part of the road the county is to pay for building will be 2½ miles long and will be a single road, while the rest of the boulevard will be double, having a park or center strip running the entire length of the roadway.

**Bessie, Va.**—The Russell-Prater Railway Co. has been incorporated to build a railway 12 miles long in Dickenson county to connect with the Carolina, Clinchfield & Ohio Railway.—Leon Isaacson, Brooklyn, N. Y., President.

**Lynchburg, Va.**—The Peoples Improvement Co. will let construction contracts very soon for an extension one mile long to Fairview Heights.—R. J. Hughes, President.

**Petersburg, Va.**—The Norfolk & Western Railway Co. will build a belt line around Petersburg; company has about secured the rights-of-way; belt line is to extend from Ferndale Park, in Dinwiddie county, to Poe Station, on the Norfolk & Western railroad, in Prince George county, a distance of about four miles.

**Kennewick, Wash.**—The Kennewick Improvement Co. has petitioned the city for a franchise to build and operate a street car line.

**Seattle, Wash.**—D. C. Conover and E. P. Moran have been granted a franchise to construct an electric railway from Bellevue to Lake Sammamish.

**Vancouver, Wash.**—The Clark County Railway has been incorporated to build electric railways in Clark County; capital stock, \$150,000. Bert Yates, J. W. Sifton and O. C. Spencer, Directors; James G. Kidwell, Walla Walla; J. H. Murphy, A. Welch, C. E. Moulton and O. C. Spencer, Incorporators.

**Huntington, W. Va.**—A company backed by Pittsburg capitalists has completed surveys for trolley lines, one from Gallipolis to Ironton on the Ohio side, a distance of 60 miles, and one from Point Pleasant to Huntington, a distance of 44 miles, and will begin the work of construction within the next 60 days.

**Port Arthur, Ont., Can.**—Council has decided to extend the municipal street railway, the Port Arthur and Ft. William Electric Railway, and bids for construction will soon be received.—W. P. Cooke, Chairman.

## BIDS RECEIVED AND CONTRACTS AWARDED

**Indianapolis, Ind.**—The Indianapolis, Cloverdale & Vincennes Traction Co. has awarded contract to J. J. Burns & Co., Chicago, for the construction of its proposed railway from Indianapolis to Vincennes by way of Mooresville, Eminence, Cloverdale, Worthington and Linton; cost, \$18,000 a mile.—E. M. Bowman President.

**Des Moines, Ia.**—The Des Moines, Winterset & Creston Electric Railway Co. has awarded to the Engineering Construction & Securities Co., 171 La Salle st., Chicago, Ill., the contract for the engineering and construction of an interurban railway from Creston to Des Moines via Macksburg and Winterset.

**Carlisle, Pa.**—The Cumberland Railway Co. has awarded contract to the Carlisle Construction Co., Carlisle, for the construction of a 24-mile electric line from Carlisle to Shippensburg via Newville.—M. P. Moore, Chief Clerk.

## BRIDGES

**Monticello, Ark.**—Drew county is considering the building of a bridge across Bayou Bartholomew.

**Pocahontas, Ark.**—The St. Louis & San Francisco Railway will build bridge across Black River near this city.—M. C. Byers, St. Louis, Mo., Chief Engineer.

**Phoenix, Ariz.**—The Board of Supervisors has received the plans for the Center st. bridge; only four were submitted as follows: From the Raymond Concrete Pile Co., of New York; B. L. Davis, of San Francisco, and L. G. Knipe, of Phoenix; Mayberry & Parker, of Los Angeles, and Richard B. Ryan, of Phoenix.

**Phoenix, Ariz.**—The Board of Supervisors has accepted the plans of Knipe & Davis for the Center st. bridge.

**Castella, Cal.**—Senator James Leavitt, James Whalen and Frank A. Keyes have appeared as a committee from this resort before the Board of Supervisors and presented a petition for a new road, including two bridges, one across the Sacramento below Castella, and the other over the same stream higher up; road proposed will be much shorter and more accessible than the old one over the hill.

**Grand Junction, Col.**—The County Commissioners are considering the construction of a bridge over the Grand River at Main st.; cost \$40,000.

**Augusta, Ga.**—City Engineer Nisbet Wingfield has received the approved plans of the Center st. bridge from the War Department.

**Brunswick, Ga.**—Senate has passed bill authorizing Glynn County to issue \$100,000 bonds for constructing roads and bridges.

**Macon, Ga.**—New bridges of steel may soon supplant the narrow wooden structures that span the Milledgeville road near the Outing Club and the Forsyth road just this side of the Idle Hour Nursery; Central of Georgia Railroad passes over the roads at both places and the bridges over which the tracks pass are both low and not long enough to make the roads safe below; County Commissioners have taken up the matter of having steel bridges put in place of the wooden ones and the engineers of the Central Railroad seem to favor the

change if the financial departments will stand for the expenditures.

**Savannah, Ga.**—Chatham County, Ga., and Beaufort County, S. C., are considering the construction of a bridge across Back River, in connection with construction of proposed Beaufort road.

**Marseilles, Ill.**—Council has passed ordinance for the construction of a bridge over Gum Creek on Union st. between Indiana and LaSalle sts.

**Newport, Ky.**—The construction of a viaduct to connect Bellevue and Newport is being considered. City Engineer George Hornung has estimated the cost at \$96,000, which includes improvement of Fairfield ave. with brick, at \$37,000, repairing culvert over Taylor Creek, and extending sewers to river, \$13,000.

**New Orleans, La.**—Plans and specifications are being prepared for the construction of a bridge over the Roundaway Bayou, near Briars.

**Concord, Mass.**—Citizens have decided to expend \$30,000 in rebuilding bridges in this city.

**Minneapolis, Minn.**—Authorization for the bridges desired by Minneapolis across the Mississippi River from 42d ave. north to 37th ave. northeast is carried in an omnibus bridge bill drawn by Representative Mann of Illinois and referred to the Committee on Commerce.

**Moss Point, Miss.**—Pascagoula Northern Railroad Co. will erect steel drawbridge.—Henry Hall, Mobile, Ala., President.

**St. Louis, Mo.**—City Comptroller Faussig has announced that bids for the free bridge bonds would be asked for Sept. 17, bonds to be dated and delivered Oct. 1; also bids for \$600,000 bonds for bridges and viaducts.

**Omaha, Neb.**—Council Committee of the Whole has adopted plans and specifications for a viaduct to be constructed over the Missouri Pacific railroad tracks on Dodge st. beginning about 46th st.; cost will not be far from \$100,000.

**Somerville, N. J.**—Somerset County Board of Freeholders is considering question of building a new bridge on Washington ave., this city, to take the place of the present county line structure, which is practically worn out.

**Minneapolis, L. I., N. Y.**—The Nassau County Board of Supervisors has decided to issue bonds for the construction of a bridge.

**Oswego, N. Y.**—Whether the citizens of this city are desirous of erecting new bridge across the Oswego River at Bridge st. this year is to be decided soon; a special election for that purpose will be held in the rotunda of the City Hall.

**Oswego, N. Y.**—Citizens have voted to erect a bridge across the Oswego River at Bridge st.

**Syracuse, N. Y.**—An ordinance authorizing a bond issue of \$17,000 to meet the city's share of the cost of the new bridge across the Erie canal at Franklin st. is being prepared for introduction in Council; bridge is to take the place of the present railroad bridge which is used by the Rome, Watertown & Ogdensburg Railroad and offers no public crossing except an overhead foot bridge; Legislature has appropriated \$17,000 as one-third of the cost and the other third is to be paid by the New York Central Railroad Co.

**Troy, N. Y.**—Council is considering the reconstruction of the toll bridge between this city and Waterford.

**Charlotte, N. C.**—The Carolina Engineering Co., Burlington, will sublet erection of steel tubes and spans of bridge 28 miles from this city.

**Winston-Salem, N. C.**—The Winston-Salem South Bound Railway Co. will erect three 800-ft. viaducts, seven deck spans over Yadkin River, three 150-ft. spans over Rocky River, 12 65-ft. deck spans over smaller streams and 16 steel overhead bridges.—O. H. P. Cornell, Chief Engineer.

**Ashtabula, O.**—The Ashtabula Township Trustees are considering constructing a bridge.

**Columbus, O.**—The Board of Service is considering the construction of a viaduct at 3d st.

**Jefferson, O.**—Ashtabula County has rejected bids for constructing a reinforced concrete culvert over Hubbard run, on the Jefferson road, Ashtabula Township.—P. C. Remick, Auditor.

**Mansfield, O.**—The Board of Commissioners of Richland County is considering construction of an 80-ft. steel bridge, with concrete abutments.—J. I. Patterson, President.

**Wapakoneta, O.**—Bids will be received July 31 for \$20,000 bonds for constructing county bridges.

**Muskogee, Okla.**—County Commissioners of Muskogee, Wagoner and Sequoyah counties are considering construction of two bridges across Arkansas River; cost \$150,000.

**Wagoner, Okla.**—The Commissioners of Wagoner and Muskogee Counties are considering plans for the construction of

bridges across streams between this city and Muskogee.

**Ashley, Pa.**—Borough, through Attorneys Garman and Keck, has begun proceedings to obtain a mandatory order requiring the Wilkes-Barre & Hazleton Railway Co. to bridge its tracks over Poplar st.

**Chester, Pa.**—The Delaware County and Philadelphia Electrical Railway Co. will erect four bridges along proposed new line; first at Naylor's valley in Upper Darby Township; this will be a viaduct; the second over the Cardington branch of the Pennsylvania Railroad at Cardington; the third over Darby Creek, between Lansdowne and Aldan, and the fourth under the Baltimore & Ohio railroad, crossing Hermasprota run in Darby Township.

**Pittsburg, Pa.**—Government engineers assigned to Pittsburg to inquire into the advisability of raising the different bridges spanning the lower Allegheny River in order to permit navigation during the high water stage have carefully considered the proposition and will likely recommend that several structures be elevated.

**Charlotte, Tenn.**—Dickson and Cheatham counties will construct a steel bridge to be built across the Harpeth River.

**Waco, Tex.**—Citizens have voted \$75,000 for building steel bridges and improving streets.

**Bowling Green, Va.**—The Board of Supervisors of Caroline County will build a bridge near Woodford.

**Danville, Va.**—Citizens will vote September 28 on \$100,000 bonds; \$25,000 of this is for a new bridge across the Dan River.

**Luray, Va.**—The Board of Supervisors of Page County has decided to build two bridges across the Shenandoah River, one at the White House, three miles west of Luray, and the other at Grave Hill, 16 miles south of Luray; State fund for road improvement and bridge building was supplemented by a fund appropriated by the Board of Supervisors, and in addition to this \$1,800 was realized by private subscriptions for the structure at the White House and \$1,600 for the one at Grave Hill.

**Kalama, Wash.**—Cowlitz and Clark counties will erect a joint bridge across the Lewis River.

**North Yakima, Wash.**—The County Auditor has been instructed to advertise for bids for the Euclid bridge which is to span the Yakima River between Mabton and Byron.

**Port Orchard, Wash.**—The Engineer has been ordered to prepare plans for a bridge on the Andrew Olsen road.

**Raymond, Wash.**—City will expend \$70,000 on bridges and streets; two large drawbridges of 123 ft. clear openings will span the Willapa and the South Fork of the Willapa.

**Spokane, Wash.**—County Commissioners have rejected bids for four small bridges over Deep Creek and will readvertise.

**Tacoma, Wash.**—The County Commissioners have decided to build a new bridge over the Puyallup River at McMillan.

**Tacoma, Wash.**—Council is considering an ordinance to grant to the Oregon & Washington Railroad a franchise to build an overhead crossing or viaduct from the north portal of the road's 8,700-ft. tunnel to the terminal grounds on the tidelands.

**Tacoma, Wash.**—Work on the new reinforced concrete bridge to be built over the gulch on North 23d st., between Fife and Oakes sts., is to be begun very soon; that there may be no delay in starting actual construction, Council has concurred in a recommendation from City Engineer W. C. Raleigh that the firm of Waddell & Harrington, bridge experts, of Kansas City, be employed to examine the plans now prepared for the bridge.

**Winnipeg, Man.**—Plans are being prepared for two new superstructures, one over Red River, the other over Assiniboine River; also for a bridge over the C. P. R. R. yards.—H. N. Ruttan, City Engineer.

#### BIDS RECEIVED AND CONTRACTS AWARDED

**Sacramento, Cal.**—Contract for constructing a reinforced concrete bridge, 100 ft. long, near Mason House, has been awarded to Clark & Henry Constr. Co., of Sacramento, for \$8,790.—Wm. B. Hamilton, County Clerk.

**Hartford, Conn.**—Contract for a new stone bridge over the Park River at Mulberry St., has been awarded to the O'Connor-Walker Cut Stone Co., of Hartford, after plans of Davis & Brooks, Architects.

**Atlanta, Ga.**—Atlanta, Birmingham & Atlantic Railroad Co. has awarded contract to American Bridge Co., New York, for erection of eight steel bridges; construction to begin soon.—Alexander Bonnyman, General Manager.

**Goff, Ida.**—The County Commissioners have awarded the contract for constructing a wagon bridge over the Salmon River to the Sheeley Bridge Co., of Denver, Col., for \$15,175.

**Chicago, Ill.**—Bids were opened July 14 by the Board of Trustees, Sanitary District of Chicago, for the metal work of the superstructure of 3 highway bridges across North Shore Channel of the Sanitary District as follows: At W. Railroad Ave., City of Evanston, Lincoln ave. and Bryn Mawr ave., City of Chicago, and the following are totals of the three bridges: Modern Steel Structural Co., Waukesha, Wis., \$23,751; American Bridge Co., New York, N. Y., \$21,605; Toledo-Massillon Bridge Co., Toledo, O., \$20,605; Fort Pitt Bridge Works, Pittsburg, Pa., \$20,596; Penn Bridge Co., Beaver Falls, Pa., \$23,947; Riverside Bridge Co., Martins Ferry, O., (2 bridges), \$10,090 and \$2,870; Wisconsin Bridge and Iron Co., North Milwaukee, Wis., \$22,371; Central States Bridge Co., Indianapolis, Ind., \$22,242; Worden-Allen Co., Milwaukee, Wis., \$22,830; Kenwood Bridge Co., Chicago (2 bridges), \$10,483 and \$2,832.—I. J. Bryan, Clerk.

**Danville, Ill.**—Contract for constructing a steel bridge over Little Vermilion River has been awarded to Decatur Bridge Co., of Decatur, for \$3,460.

**Fulton, Ill.**—A Committee from the Board of Supervisors and Highway Commissioners have received bids for an iron bridge consisting of one 80-ft. span with 80-ft. approach on the east end, and a 52-ft. approach at the west end. There were two bidders: The Clinton Bridge Co. and Elliot Bros., of Savannah. The Clinton Bridge Co. put in a bid at \$2,189, and Elliot Bros. bid was \$3,219. The bid of the Clinton Co. was accepted, and a contract was drawn up and signed for the work.

**Franklin, Ind.**—Contract for constructing two bridges with concrete abutments, etc., opened July 15, has been awarded to Albert Harmon, of Columbus, Ind., at \$4.40 per cu. yd.—Wm. B. Jennings, County Auditor.

**Prestonburg, Ky.**—Floyd County Commissioners have awarded contract to Owego Bridge Co., Owego, N. Y., at \$10,300 to construct three bridges.

**Bangor, Me.**—Bids on the repairs on the abutments and piers of the Bangor and Brewer Bridge authorized by the city government were opened, July 12, by the City Engineer. The contract was not awarded by the committee, but will be referred to the meeting of the city government. There were but four bids entered and they were as follows:

P. H. Doyen & Co., Portland, \$33,930; J. F. Spellman & Sons, Bangor, cost plus 10 per cent; W. H. Ellis, Boston, work on Brewer abutment, \$4,375; river piers, removing riprap, \$10 per yd., three coffer dams, \$2,500 each, laying concrete under water, \$14 per yd., laying concrete in air, \$12 per yard, pointing granite in piers, 5c. per lin. ft.; extra work, cost plus 15 per cent; Grady & McCarthy, Bangor, Brewer abutment, \$1,800; river piers, \$18,845.

**Bar Harbor, Me.**—The bids for the construction of the Bar Island Bridge, as received by the Board of Selectmen, and opened, July 10, are as follows:

The M. Lavorgna Co., of Canton, Me., \$73,473.50; Grady & McCarthy, Bangor, \$46,935; Nevils & Stafford, Bar Harbor, \$39,550; Philip H. Doyen Co., Portland, \$52,750; Small & Ingalls, Bar Harbor, \$40,894. The appropriation made by the town for the construction of the bridge was \$35,000, and by the failure of all to come within the appropriation, none of the above bids will be accepted.

**Bar Harbor, Me.**—No definite decision has been made in the Bar Island Bridge matter, because all the bids exceeded the amount of money appropriated by the town; a stone bridge or causeway is to be built from the upper harbor, near the Swimming Club pool, across the bar to Rodicks Island, a distance of some 1,800 ft.; the bar is covered with water at high tide, but affords passage at low and half tides; bids varied materially in amount, there being a difference between the highest and the lowest bids of nearly the total sum raised.

**Haverhill, Mass.**—Cashman Bros., Newburyport, have secured the contract for constructing the southerly approach to the Haverhill Bridge for \$28,157.

**Slingerlands, N. Y.**—The contract for constructing a concrete bridge over Normanskill Creek on new Scotland Plank Road has been awarded to Owego Bridge Co., of Owego, for \$11,000.

**Cleveland, O.**—In its fight to be awarded the contract to supply the structural steel for the Denison-Harvard viaduct, in Cleveland, a signal victory has been won by the McClintic-Marshall Construction Co., of Pittsburg, the Supreme Court of Ohio having ordered the Cuyahoga County Commissioners to award the contract to the Pittsburg firm. The Commissioners, early last year, advertised for bids for 6,300 tons of steel, the lowest bidder being the Pittsburg company. In spite of this fact, the contract was awarded to a Cleveland firm. The matter was taken to the county courts, which upheld the Commissioners. The Supreme Court, however, reversed the decree



of the county courts and ordered that the contract be given to the lowest bidder.

**Hamilton, O.**—The following contracts were awarded by the County Commissioners: H. C. Jacoby to place timbers at each approach to the Grand Boulevard Bridge over the canal and replace the bridge on its bearings for \$10.40; also to place one piece of timber over the floor of the Trenton River Bridge for \$3.36.

James C. Brate to repaint walls and construct new parapets and a concrete steel superstructure at the D. E. Ayers farm, Union Township, for \$107.75.

John Golden to construct a concrete steel box culvert at the Helm farm, Madison Township, for \$116.27.

H. C. Jacoby to reflow the east span of a bridge over the river on the levy road west of Middletown, for \$794.82.

**Butler, Pa.**—The County Commissioners, July 9, awarded contracts for seven new bridges which will be erected at once in different sections of the county, the total cost of the bridges to be \$6,683.

Two companies, the Penn Bridge Co. of Beaver Falls and the Nelson Merydith Co. of Pittsburgh and Chambersburg, were the successful bidders for the new bridges.

Following are bridges awarded to the Penn Co. and the contract price of each for the superstructure:

Keck bridge, across Brush Creek in Cranberry Township, 39 ft. long, \$984.

Adams bridge, across Glade Run in Adams Township, 41 ft. long, \$982.

Boydstown bridge, across Connoquenessing Creek in Oakland Township, 45 ft. long, \$962.

McMurry bridge, across branch of Slippery Rock Creek in Marion Township, 37 ft. long, \$861.

Flinner bridge, across Yellow Creek in Muddy Creek Township, 37 feet long, \$904.

The Merydith Co. received the following: McFann bridge, across Glade Run in Middlesex Township, 41 ft. long, \$890.

Moniteau bridge, across Slippery Rock Creek in Cherry Township, 48 ft. long, \$1,100.

The contracts for the abutments, etc., were let as follows:

Keck bridge, concrete abutments, to J. E. Winters at \$5 per cu. yd.

Adams bridge, concrete abutments, to J. E. Winters at \$4.90 per cu. yd.

McFann bridge, masonry abutments, to R. E. Dunbar at \$4.50 per cu. yd.

Boydstown bridge, concrete abutments, to Thomas H. Henon, at \$4.50 per cu. yd.

McMurray and Flinner bridges, masonry abutments, to Thomas H. Henon at \$4.48 per cu. yd.

At the prices here given the county will furnish the cement for the work.

**Moosic, Pa.**—McConville & Fitzpatrick, Pittston, have secured contract for constructing Moosic bridge, for \$5,400.

**Philadelphia, Pa.**—Bids have been received for five bridge building contracts to be awarded by the city, at a total cost of \$200,000. Two McNichol concerns, the Filbert Paving & Construction Co., and the McNichol Paving & Construction Co., bid against each other, and each was low on one contract, McCormick & Co. low on two, and John McMenamy low on the fifth contract. The bridges are to carry streets either under or over railroads, and in one instance the cost is to be shared by a railroad company, because the new bridge will eliminate a grade crossing.

The Filbert Co. bid \$32,300, the low price, for the construction of a bridge on the line of Roberts ave., under the Chestnut Hill branch of the connecting railroad, specifying 8 months for completion. The McNichol Co. was higher, with \$33,489, naming 4 months, and John McMenamy next with a bid of \$33,400, in 6 months.

The McNichol Paving & Construction Co. bid \$36,000, the low figure, and 4 months for completion for the bridge on Chelton ave., under North Pennsylvania Railroad.

John McMenamy bid \$32,800, the low price, and named 6 months to complete the construction of the bridge on Hunting Park ave., under the Chestnut Hill branch under the Reading Railway.

McCormick & Co. bid \$26,500, and named 9 months for completing the bridge on 62d st., over Philadelphia, Washington & Baltimore Railroad.

The same firm was low bidder on the contract for the bridge on Hunting Park ave., under the Norristown branch, Philadelphia & Reading Railway, 2-track, 3-span, plate girder; the bid is \$35,258, and the time specified 6 months.

**Reading, Pa.**—Willauer & Co., of Pottstown, have secured the contract for erecting a reinforced-concrete arch bridge in Colebrookdale Township, Berks County, over Ironstone Creek near Gabelsville.

**Scranton, Pa.**—County Commissioners J. J. Durkin, Victor Burschel and Robert Allen, with County Controller E. A. Jones, have awarded contracts for the building of three bridges and repairing five bridges

damaged by the recent heavy floods. The contracts were awarded as follows:

Concrete floor on bridge in Benton, awarded to W. E. La Rue, price \$175. Concrete floor on bridge in Waverly, awarded to W. E. La Rue, price \$350. Concrete floor on bridge in Benton over branch of Tunkhannock Creek, awarded to McLaughlin & Dingleberry, price \$440. Concrete floor on bridge in South Abington; awarded to McLaughlin & Dingleberry, price \$210. Steel girder and concrete bridge in Newton, awarded to Munley & Cummings, price \$795. Steel superstructure and concrete substructure with concrete floor over High Falls Creek, Ransom, awarded to York Bridge Co., price \$4,087. Steel superstructure concrete substructure with concrete floor over High Falls Creek at Milwaukee, in Ransom, awarded to York Bridge Co., price \$3,500.

**Williamsport, Pa.**—The County Commissioners, July 13, opened the bids for supplying the material and repairing a number of bridges. The Owego Bridge Co. was the lowest bidder for supplying the steel necessary for repairs to all bridges, and got the contract at its bid of \$753. The contract for the lumber went to John Heilman. M. K. Dawes was awarded the contract for hauling the material to and repairing the Erie ave. bridge over Lycoming Creek, his bid being \$47. W. W. Wolf got the contract for hauling material and repairing the Market street river bridge, for \$377. The contract for hauling material and repairing the four out-of-town bridges—one at Slate Run, two at Trout Run, and the Rogers Bridge—went to M. K. Dawes, his bid being \$340 for all of them.

**Mapleville, R. I.**—Bids have been received by Town Council of Burrillville, at Harrisville, for constructing a reinforced-concrete girder bridge with retaining walls, approaches and parapet walls over the Chepachet River; contract was awarded to the Globe Coal Co., Woonsocket, at \$2,302. Seagrave & Lincoln, Engineers, Commercial Bldg., Woonsocket, R. I.

**Memphis, Tenn.**—The Memphis Park Commission has awarded a contract to James A. Omberg for 16 concrete bridges to be built in Overton and Riverside parks and along the route of the park drive.

**North Yakima, Wash.**—C. E. Lum, has secured the contract for constructing a 2-span bridge over the Yakima River for \$16,661.

**Barboursville, W. Va.**—The Brackett Bridge Co., Cincinnati, O., has been awarded contract for building a bridge over the Guayandotte River, at \$12,395.

**Appleton, Wis.**—Council has awarded the contract for constructing the Pacific St. Bridge to the Modern Engineering Co., of Appleton. Its bids as submitted to Board of Public Works were \$28,991 and \$36,175 for a concrete structure.

**Prince Rupert, B. C., Can.**—The Grand Trunk Pacific Ry. Co. has awarded the contract for the construction of six steel bridges on the first section east to here to the Canadian Bridge Co., Walkerville, Ont.; cost, \$400,000.

**Sault Ste. Marie, Ont., Can.**—C. N. Coburn, Chief Engineer, Manitoulin & North Shore Ry. Co., has awarded contract for bridge work on first 8 miles section of this line to O'Boyle Bros. Construction Co., Ltd., of this city.

**Stewartsville, Ont., Can.**—Contracts for constructing a steel bridge, 3 spans, with concrete piers and abutments, over the Madawaska River at Stewartsville, about 8 miles from Annprior, have been awarded as follows: Substructure to J. R. M. Quigge, or Annprior, \$4,995, and superstructure to Hamilton Bridge Co., Hamilton, for \$4,200. Maccallum & McAllister, Continental Life Bldg., Toronto, Engineers.

## MISCELLANEOUS

**Birmingham, Ala.**—Mayor O'Brien is in favor of the erection of a crematory.

**Birmingham, Ala.**—Chief Bodeker is urging the purchase of an automobile patrol wagon; cost \$2,700.

**San Jose, Cal.**—Council will receive bids at once for sprinkling the city streets with the California Dustless Compound.

**Yuba City, Cal.**—The City Trustees have passed to the second reading the ordinance providing for street sprinkling; according to the provisions of the ordinance, the cost of sprinkling for the season is to be estimated and the money raised by assessing the property benefited so much per front foot.

**Hartford, Conn.**—Senate has passed bill empowering city to build and maintain docks on the Connecticut and Park rivers.

**Wilmington, Del.**—The Street and Sewer Directors are planning to purchase an automobile for use in supervising street work.

**Columbus, Ga.**—Citizens will vote August 19 on \$75,000 bonds for erection of hospital.

—M. M. Moore, Clerk of Council.

**Lewiston, Ida.**—City is considering construction of a two-story City Hall.

**South Bend, Ind.**—City Engineer Alonzo J. Hammond has completed plans for the construction of a wall along the bank of the St. Joseph River at Howard Park; it will be of cement or brick; wall will be 3 ft. high and will extend from Jefferson st. bridge to the Grand Trunk Railroad.

**Council Bluffs, Ia.**—City Physician George Hay and City Solicitor W. David Lloyd are preparing an ordinance to be presented at a coming meeting of City Councils, which will authorize the making of a contract with one man for the hauling and handling of all the garbage in the city.

**Kansas City, Kan.**—The Board of Park Commissioners has sold \$45,000 bonds to Spitzer & Co., New York; money will be used to acquire property for parks and playgrounds; engineers are laying out a cliff drive to follow the Kaw River bluffs through Riverview and Armstrong to the City Park.

**Lexington, Ky.**—Citizens are urging the establishment of public drinking fountains.

**Bar Harbor, Me.**—The Board of Health will prepare specifications and receive bids for the disposal of garbage for a term of not exceeding five years.

**Fall River, Mass.**—City has awarded \$100,000 playground bonds to Blake Bros.

**Lawrence, Mass.**—Council is considering a \$40,000 expenditure for the construction of a garbage incinerator.

**Minneapolis, Minn.**—The Board of Park Commissioners has asked that the Council issue \$50,000 in improvement bonds for park purposes.

**Virginia, Minn.**—Tenders for the construction of the annex to the city hall, at an estimated cost of \$15,000, are invited by the city, the City Clerk having been directed to advertise for bids.

**Hoboken, N. J.**—The Police Board will purchase an electric combination ambulance and patrol wagon.

**Paterson, N. J.**—Police Chief Bemson has recommended the establishment of new precincts and substations, signal lights, patrol boxes, Bertillon system of measurements and the organization of a detective bureau.

**Seabright, N. J.**—Frank B. Conover, of the Monmouth Ice Co., will erect a 50-ton plate ice plant, at a cost of \$50,000; work will start in early fall and the plant will be in full operation before the opening of the season of 1910.

**Port Plain, N. Y.**—Citizens are considering the purchase of the grounds of the Clinton Liberal Institute as a site of a park.

**Troy, N. Y.**—The Board of Contract and Supply has ordered the purchase of a wash water borer to be used in making borings of soil; cost about \$100.

**Yonkers, N. Y.**—City has awarded \$102,000 local improvement, \$80,000 park, and \$30,000 public building bonds to Kountz Bros.

**Cincinnati, O.**—The Park Board has requested the City Council to pass an ordinance authorizing a bond issue of \$1,000,000 for the purpose of extending the park system of the city.

**Covington, O.**—Alderman W. N. Ranshaw is urging the installation of a complete police patrol system.

**Dayton, O.**—Bids will be again advertised for on the new Wayne ave. market house, in an effort to come within the \$35,000 bond issue; modified plans have been approved.

**Tiro, O.**—Town Council has appointed a committee to purchase a sprinkling wagon for the town.

**Oklahoma City, Okla.**—W. A. Ledbetter, attorney for the Waters-Pierce Oil Co., is interested in a new \$700,000 ice company.

**Portland, Ore.**—City has decided to erect proposed jail west of 4th st. and north of Washington.

**Portland, Ore.**—City will soon have a new garbage crematory; it will be built on the site of the old one in the northern part of the city.

**Portland, Ore.**—Council is considering the erection of a new police station, Municipal Court building and receiving hospital in one building.

**Portland, Ore.**—Initial steps toward the building of a new garbage crematory and the erection of a modern central police station and municipal court building have been taken by the Ways and Means Committee of Council; resolution was recommended to the Council requesting the Board of Health to select a site for the proposed crematory and prepare plans and specifications and award the contract for the incinerator; a like resolution in regard to a new central police station and municipal court building was also recommended to the Council.

**Ebensburg, Pa.**—Town Council is considering the erection of a \$6,000 municipal building.

**Charleroi, Pa.**—The Real Estate Committee has been empowered by Council to get plans and specifications for a fireproof garbage plant and to report to Council at some future time.

**Harrisburg, Pa.**—Representatives of the West End Improvement Association are urging the establishment of playgrounds in the western end of the city and for the improvement of the river front above Calder st. Committee consisted of Tilman H. Bach, Charles S. Weakley and E. L. Jenkins.

**Hazleton, Pa.**—City will advertise for bids for uniforms and horses for the proposed mounted police.

**Johnstown, Pa.**—Council has given two readings to ordinance appropriating \$1,500 for the purchase of an automobile for the City Engineer's Department.

**Lebanon, Pa.**—Mayor Marquart has approved a resolution to reconsider the garbage disposal plant plan of the Health Board.

**Philadelphia, Pa.**—Projects for improved shipping conditions along the Delaware River front are being discussed; one plan involved the construction of a new bulkhead along the river front, from the south side of Vine st. to the north side of Calowhill; proposed bulkhead will be 720 ft. long, with an estimated cost of \$120 a ft., calling for a total expenditure of \$86,400.

**Wilkesburg, Pa.**—Council is considering the erection of a public comfort station at Franklin ave. and the P. R. R.; cost \$1,500.

**Memphis, Tenn.**—Memphis Park Commission decided to erect carnivora house and two cages for animals; cost \$25,000.

**Corsicana, Tex.**—City Secretary Walter Burgess is securing data concerning erection and cost of a crematory.

**Dallas, Tex.**—The Board of Municipal Commissioners has adopted the budget for this year; the Sanitary Department will get \$10,000 increase—this for the increase in the Street Cleaning and Inspecting Department; two new carts at \$45 each and two new trash wagons at \$125 each will be purchased; 28 sprinklers will be hired for six months at a cost of \$15,160.

**Dallas, Tex.**—The Board of Commissioners has adopted the annual budget; \$4,340 is provided for police and fire alarm system, \$500 for automobile for City Chemist, and \$1,825 for automobile for Fire Chief.

**Alexandria, Va.**—The Street Committee has been instructed to ascertain the cost of signs for various street corners.

**Vancouver, Wash.**—Howard Whiting, representing the Cascade Contract Co., has submitted a proposition to the Council offering to build a dock if the Council would grant it the free use of a site at the foot of Main or any other street for a period of five years, the dock to be turned over to the city at the expiration of the five years; the proposition was taken under advisement.

**Fairmont, W. Va.**—Plans for the new county jail and residence of the jailer, which are to be constructed here, will be drawn by Architect E. J. Woods, of Clarksburg; work on the two new structures will be started in a short time and they will be completed inside the year.

**Wheeling, W. Va.**—Council has adopted a resolution to hire an accountant to install a new counting system in the city departments.

**Milwaukee, Wis.**—An automobile will be purchased for the Health Department.

**New Westminster, B. C., Can.**—Council has decided on the following civic improvements: New jail and police court, \$6,000; Royal Columbian Hospital, \$30,000; paving Columbia st., \$48,000; Columbia st., lighting, \$6,000; incinerator, \$20,000; street improvement, \$31,000; advertising, \$4,000; water works, \$253,000; total cost, \$398,000.

**Owen Sound, Ont., Can.**—A large dry dock is contemplated by this town; Polson Iron Works, Toronto, will operate it.

## BIDS RECEIVED AND CONTRACTS AWARDED

**Yuba City, Cal.**—L. V. Lowder has been awarded the contract for the ensuing year to manage and run the county's free ferry at Eddy's Landing, on the Sacramento, in West Sutter; price paid will be \$418 for the year.

**Augusta, Ga.**—The Canal and River Commission has declared all of the bids on the river work off; work on the river was offered to W. J. Oliver & Co., but on account of the smallness of the job he refused to take it; his bid on this part of the protection work was about \$16,000, and he stated that it would cost him too much to move his force here just to do that job; he wanted all or none of the work. A committee composed of Mayor Dunbar, Commissioner of Public Work Nisbet Wingfield and Chairman Pope, was appointed to take up the matter of letting the contract for the work on Hawk's Gully, as this was the most important at present; other rip-rapping will be left off until the national government has something to say on the matter. As the Oliver bid has been eliminated from the list A. J. Twigg & Son is the next lowest bidder, their bid being about \$17,000 for the work; they will be offered the work by the special committee.

**Aurora, Ill.**—A new firm, Kohly & Bauman, has been awarded the 1909-1910 garbage contract. Moses Baltazor has had the job for years, and it was generally thought he would land it again. Baltazor, however, was the highest bidder with \$2,350, while Kohly & Bauman offered to do the work for \$2,100. The successful bidders begin their work Aug. 1.

**Chicago, Ill.**—Henry Gillsdorf was low bidder for alterations to police station; \$25,000 will be expended.—J. J. Hanberg, Commissioner of Public Works.

**Bar Harbor, Me.**—John E. Bunker, Chairman of the Board of Selectmen, read the report of the Board as to the result of the advertising by the Board of Selectmen and Board of Health for the proposals for the taking care of the town's garbage for term of 5 and 10 years. Bids had been received as follows: Grindle & Murch, 5 years, \$15,252; 10 years, \$32,200; J. A. McLean, 5 years, \$15,450; 10 years, \$29,900; J. E. & B. A. Tripp, 5 years, \$15,500; 10 years, \$33,500; Frank Spratt, who has had the contract for a term of years, 5 years, \$15,000; 10 years, \$29,500; new bids will be invited.

**Eveleth, Minn.**—H. K. Masterson has been awarded the contract of hauling the garbage at \$199 per month; only one other bid was received, that of Suet & Mattala, at the same figure. As Masterson agreed to use the city garbage tanks he was awarded the contract.

**Bloomfield, N. J.**—Town has awarded scavenger contract to A. D. Baun at a bid of \$3,588.

**Paterson, N. J.**—Contracts for the new extension to the Isolation Hospital, which is to be used as a tubercular pavilion, have been awarded by the Board of Health. Following were the successful bidders on the pavilion: Abram Verduin, masonry, including concrete flooring, \$6,232; Joseph Black & Bros., carpenter work, \$2,932; Rutt Bros., roofing, \$434; George S. O'Neill, plumbing, \$1,345; Maher Bros., steam fitting, \$915; Moshier Paint Co., painting, \$240. Total, \$12,092.

**New York, N. Y.**—Bids were received by the Department of Parks for furnishing and erecting iron railings around the grass plots in Broadway, between 82d and 92d Sts.

Contract was awarded to Clarke & Stowe, Greenpoint Ave., Brooklyn, at \$14,900.

**Devils Lake, N. D.**—The contract for the new jail and Sheriff's residence has been let by W. D. Gillespie, of Fargo. This will be one of the largest and most up-to-date jails in the State, and will be another addition to the already large number of fine public buildings in that city. For the general contract the bidders were as follows: Dinnie Bros., Grand Forks, \$23,250; Tom Powers, Fargo, \$23,472; C. H. Johnson & Co., Fargo, \$23,998. Dinnie Bros. being the lowest bidders, were awarded the contract.

The bidders for the heating and plumbing were as follows: Fargo Plumbing & Heating Co., \$2,862; Spriggs Bros., Grand Forks, \$2,940; E. J. Harrington, Fargo, \$2,987. The Fargo Plumbing and Heating Co. was awarded the contract.

For the electric fixtures and wiring there were two bidders: Fargo Plumbing & Heating Co., \$570; Fargo Electric Supply Co., \$467. The latter was awarded the contract.

There were three bidders for the jail fixtures and cells, and these were as follows: Diebold Safe & Lock Co., \$8,476; Pauly Jail Co., \$10,041; Stewart Jail Works Co., \$9,700. The Diebold Safe & Lock Co. was awarded the contract.

**Galveston, Tex.**—Contracts have been let for \$250,000 improvements, which include a 1,000 room bath house on the site of the one destroyed by the storm, to cost \$50,000; a second large bath house, to replace another wrecked by the storm, will be built, and a steel fishing pier, extending into the Gulf 1,000 ft.

**Anacortes, Wash.**—The contract for building the new city library to be erected at 7th and M sts., has been awarded to A. M. Dilling and J. J. See, whose bid was \$9,306.

**Hayward, Wis.**—The Chippewa Falls Construction Co., Chippewa Falls, has received the general contract for the county jail, at \$11,400; Oliver Olson, of Hayward, received the steam heating, at \$1,367; Wm. A. Rheinhardt, of Ashland, the plumbing and electric wiring, at \$1,245; and the Champion Iron Co., Kenton, O., for the cells and structural steel work, at \$5,600.—Henry Wildhagen, Ashland, Architect.

**Madison, Wis.**—The contract for building the new west wing of the university engineering building, and for the addition to the dairy building, has been granted by M. E. McCaffrey, Secretary of the University Board of Regents, to M. C. McCarthy, a contractor, whose bid for the two additions was \$57,683.

**Milwaukee, Wis.**—That contracts for auditing the city's books will not be let two years in succession the same firm has been decided by the Finance Committee, when bids for auditing the books of the various departments for 1908 were considered. The bid of \$1,600 by Adkins, Biwer & Mason Co. was rejected because this firm was given the contract last year; maximum and minimum bids were found for \$3,400 and \$1,280. All above \$2,000 were eliminated, leaving ten firms under consideration.

**Racine, Wis.**—Contracts have been awarded, leaving ten firms under consideration. State Street adjoining the Driver Manufacturing Company and for installing a heating plant in No. 1 engine house. Peterson & Johnson were the successful bidders for this work and were awarded the contract on a bid of \$410. The Driver Manufacturing Company, who first petitioned the council, will pay \$100 toward the cost of the wall, according to their original agreement. The contract for installing a heating plant in No. 1 engine house was awarded to Smollen & Schoenleben on a bid of \$665.

## TOO LATE FOR CLASSIFICATION

### STREET IMPROVEMENTS

**Lewiston, Ida.**—Council has authorized the preparation of estimates for the extension of the present paving district for a distance of nearly a mile in the eastern section of the city.

**Malden, Mass.**—Landscape Architect A. A. Shurtleff has recommended that Oliver and Waite sts. be extended and that Maplewood square be enlarged; also other minor improvements.

**Syracuse, N. Y.**—The Highway Committee of the Common Council proposes to make a junketing trip to look up the different kinds of pavements, the material of which is new to this city; committee consists of Aldermen Louis Kruger, John H. Bedford and William Meagher.

**Akron, O.**—Mayor Sawyer has received two proposals from concerns who offer to prepare plans and estimates for a garbage disposal plant; propositions received were from the C. O. Bartlett & Snow Co. of Cleveland and the other from the American Furnace and Machine Co. of Pittsburgh; both of the propositions have been

turned over to the Clerk of the Council, Dow Harter.

**De Pere, Wis.**—The Committee on Streets and Sidewalks, Collette and Steckart, has been instructed and authorized to prepare in a printed form the contract for doing the paving work on Broadway and to let the contract provided for by law; bids will be advertised for by the Committee on Streets and Sidewalks immediately and they will be opened August 19; it is estimated by the members of the Council that the cement pavement to be laid on North Broadway will cost about \$30,530.02; total cost is exclusive of what work is to be done by the Green Bay Traction Co.; traction company will pave the street between its rails and a foot on each side.

**Milwaukee, Wis.**—Controller August M. Gawin has announced that the city's street improvement bonds, amounting to \$375,000, have been sold.

### BIDS RECEIVED

**Terre Haute, Ind.**—The contracts for the construction of three new cement alleys have been let. Foster & Teagarden, of

Union City, received the contract for building the alley between 6th and 7th sts. from Mulberry to Jefferson; the price was \$1.79 per lin. ft. Louis Peck was successful in landing the job for the alley between Main and Washington sts. from Madison to Monroe at \$1.54 per lin. ft. The alley between Madison and Monroe from Charles to Howard will be built by Peck at a contract price of \$1.55 per lin. ft.

**Butler Pa.**—Tony Morelli has been awarded contract for the paving of Beckett ave. and N. J. Boyer for the paving of Franklin st., the bids of the two having been found to be the lowest on the tabulation of the different bids; work will be started on the paving of the streets within a short time.

### SEWERAGE

**Clay Center, Kan.**—The People's National Bank has seven of the eleven thousand dollar bonds issued for the purpose of building a main sewer; the Citizens' tSate Bank takes two, and W. H. Fletcher took two.

**Albert Lea, Minn.**—Proposals will be re-